

Installation & Operating Manual



ART 642 & ART 645 Gunmetal Bronze Safety Valve

Albion Valves (UK) Ltd

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1. Introduction

- Albion Valves (UK) Ltd ART 642 & ART 645 Safety Valves are designed to be used as a "last line of defence" and offers the final means of reducing excess pressure before total failure. Total failure of a pressurised system may result in damage to property or people.
- Albion Valves (UK) Ltd ART 642 & ART 645 will open immediately and completely to avoid system failure.
- Albion Valves (UK) Ltd ART 642 & ART 645 Safety Valves can be set to relieve at an overpressure / discharge capacity which is suitable to a system requirement or sized for a discharge capacity.
- Albion Valves (UK) Ltd have been categorised in accordance with PED 2014/68/EU as Category IV.
- Albion Valves (UK) Ltd ART 642 & ART 645 Safety Valves are set and sealed prior to supply.

Valve Type	Size Range	Connection Type	Temperature Rating	Pressure Rating (Max)	
ART 642 Screwed	DN 15 – DN 65	ISO 228	See datasheet	16	
ART 642 Flanged	DN 25 – DN 65	BS EN 1092	See datasheet	16	
ART 645 Screwed	DN 15 – DN 65	ISO 228	See datasheet	16	
ART 645 Flanged	DN 25 – DN 65	BS EN 1092	See datasheet	16	

2. Technical Data

Seat-Seal/Diaphragm Options

The temperature rating is dependent on the seat-seal/diaphragm options. Please see the table below for further information. Please note: Albion Valves (UK) Ltd stocks the EPDM/EPDM version.

Option	Materials	Туре	Working Temp.
PTFE/ EPDM	Polytetrafluorethylen/Ethylen-Propylene- Diene (Standard)	Flat seal and moulded diaphragm	–50°C to +195°C
EPDM/ EPDM	Ethylen-Propylene-Diene/Ethylen- Propylene-Diene	Flat seal and moulded diaphragm	–50°C to +150°C
PTFE/FKM	Polytetrafluorethylen/Fluorcarbon	Flat seal and moulded diaphragm	-30°C to +200°C
FKM/FKM	Fluorcarbon/Fluorcarbon	Elastomere seals and moulded diaphragm	–20°C to +200°C

3. Valve Features

- Albion Valves (UK) Ltd ART 642 & ART 645 are suitable to be used with both gases and liquids.
- Albion Valves (UK) Ltd ART 642 & ART 645 can be provided with individual test certificates to validate performance criteria in specific applications.
- Albion Valves (UK) Ltd ART 642 & ART 645 are manufactured from gunmetal which gives good corrosion resistance making it an ideal material for the harshest of environments.

4. Valve Installation

- Albion Valves (UK) Ltd recommend that the installer adheres to the installation requirements as specified by the Water Supply Water Fittings Regulations 1999.
- It is the responsibility of the installer to ensure the valve is suitable for service conditions e.g., temperature, pressure, and service media.
- Consideration should always be given to galvanic corrosion during installation.
- It is the responsibility of the installer to ensure that the valve, and adjoining pipework is suitably supported to avoid any undue stresses being applied to the valve.
- Suitable sealing materials should be used during installation.
- Safety valves should always be installed vertically with the spring housing directly above the valve seat. Safety valves should always vent to atmosphere.
- Cleanliness is essential to the correct operation and tightness of safety valves. All reasonably practicable precautions should be taken to ensure contamination of the valve cannot take place. Safety valves ate provide with inlet and outlet protection; these should not be removed until the point of install.
- As cleanliness is of such importance, system should be suitably cleaned / flushed prior to valve installation. This reduces the chances of debris contaminating the seat in a scenario where excessive pressure is released.
- Safety valves should be handled carefully and shouldn't be subjected to shock.
- Safety valves should never be lifted using the valve pressure discharge lever.

5. Approvals Classification

• Please contact Albion Valves (UK) Ltd Quality Department for further details of any specific product approvals and accreditations.

6. Maintenance

- A full risk assessment should be undertaken prior to any works taking place.
- In the case of safety valves with a lifting device it is recommended, and in certain applications stipulated that the valves from time to time must be made to blow-off by lifting the seal off the seat, this is in order to assure the correct functioning of the safety valve.
- The lifting device is not to be operated when in a pressure-free state.
- Should the valve not reseat after routine maintenance has taken place, please return to Albion Valves (UK) Ltd for assessment.

7. Valve Marking

• Further details of safety valve markings is given below.

TÜV symbol • Safety valve • Year of component test • Component test number • Narrowest flow cross-section •	
Code letters: D/G (S/G) designed for steam/gas F (L) designed for liquids Coefficient of discharge Set pressure in bar •	3

8. Warranty

- Albion Valves (UK) Ltd ART 642 & ART 645 Safety Valves are supported by a 5 year warranty. Further details can be found on our website.
- Removal of the seal wires and / or crimp tag will immediately void the product warranty.

About Albion Valves (UK) Ltd

Albion has been supplying valves and fittings to the building services and industrial markets for the past 40 years.

Albion was created with the sole purpose of providing quality products at an affordable price. With a growing reputation for quality and reliability, Albion is now an established brand providing the industry with a trusted alternative to premium-priced products.

Our commitment to setting the highest standards in all areas of our business means, if you're looking for quality, service, delivery and choice — you'll find it's all at Albion.

Quality

Whatever you need, you can rest assured that if it comes from Albion it has been designed and manufactured to deliver optimum performance and is accredited with the necessary approvals. Our inhouse quality department are always on hand too!

Service

We pride ourselves on our customer service – we have even won awards for it! Our cradle to grave approach means you will never be on your own!

Delivery

We know that time is money, and when a priority project depends on a part you can trust Albion to deliver – next day for all orders placed before 4:00PM.

Choice

We may have started out with a single brass ball valve, but our range has grown substantially since and we now consider ourselves to be a 'One Stop Shop' with our comprehensive range. It is becoming more and more apparent to the industry, that it really is all at Albion.