

INSTALLATION, OPERATION AND MAINTENANCE MANUAL

Safety Valve



Ref. GENE BRE: 2252 – 2252N – 2253 – 2253N – 2256 – 2257

Installation, Operation and Maintenance Instructions

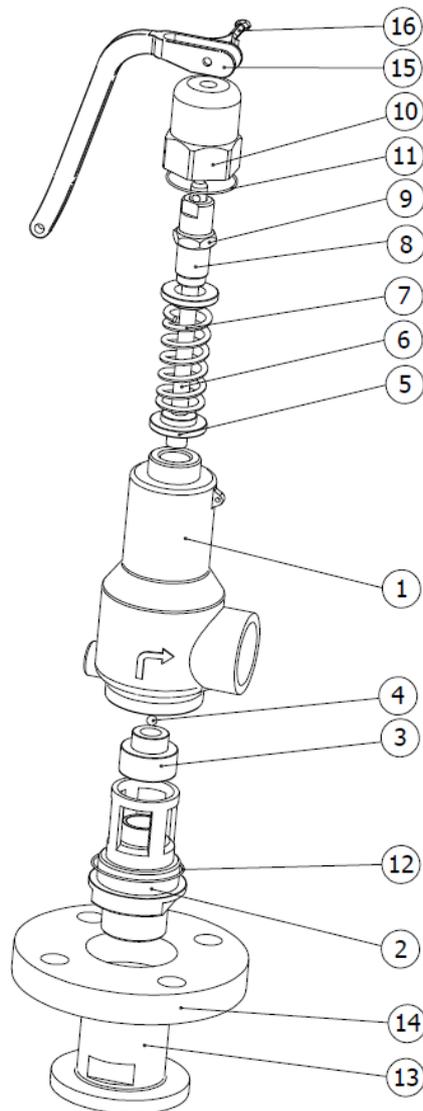
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1) Product description

Genebre, S.A. offers a wide range of safety valves designed and assembled to handle and drive fluids (gas or steam) in industrial procedures.

The compatibility of materials used to build the valves (see technical specifications) and the application of valves to the different industrial processes is at user's risk. Valves will have an optimal behaviour when working conditions do not exceed pressure and temperature limits (pressure curve) for which they have been designed. Please, refer to the product datasheet.

2) Exploded view



2.1) List of parts

Nº	Denominación / Name	Material	Acabado Superficial / Surface Treatment	Observación
1	Cuerpo / Body	1.4408	Granallado / Shot blasting	-----
2	Tapa / Cap	1.4408	Granallado / Shot blasting	-----
3	Disco / Disc	1.4408	Lapeado / Grinding	-----
4	Bola / Ball	AISI 316	-----	-----
5	Guía / Guide	AISI 316	-----	-----
6	Eje / Stem	AISI 316	-----	-----
7	Muelle / Spring	AISI 302	-----	-----
8	Tornillo / Screw	1.4408	-----	-----
9	Tuerca / Nut	AISI 316	-----	-----
10	Caperuza / Cap	1.4408	Granallado / Shot blasting	-----
11	Junta/ Gasket	PTFE	-----	-----
12	Junta/ Gasket	PTFE	-----	-----
13	Acoplamiento / Coupling	1.4408	Granallado / Shot blasting	Only articles 2256 and 2257
14	Brida / Flange	1.4408	Granallado / Shot blasting	Only articles 2256 and 2257
15	Palanca / Lever	1.4308	Granallado / Shot blasting	Only articles 2253 and 2257
16	Clip / Cotter Pin	AISI 304	ISO 1234	Only articles 2253 and 2257

Available models:

- Ref. 2252: Safety Valve GAS thread
- Ref. 2252N: Safety Valve NPT thread
- Ref. 2253: Safety Valve GAS thread with handle
- Ref. 2253N: Safety Valve NPT thread with handle
- Ref. 2256: Safety Valve EN PN16 flange
- Ref. 2257: Safety Valve EN PN16 flange with handle

3) Storage

If the valve is not installed immediately, it is recommended that the protective packaging not be removed to prevent any blows or the accumulation of dirt. This packaging should not be removed unless the valve is going to be installed. Where possible, the valves must be stored in a dry clean place.

4) Installation Instructions

4.1) Preparation

Remove any remains of packing material from the valve.

Significant problems may arise with any valve installed onto dirty piping.

Ensure that the pipe is free from dirt, welding particles, etc. prior to installation as the valve may suffer irreparable damage during the start-up of the equipment → prepare a clean working area.

Make sure there is enough space for future maintenance operations.

Monitor the correct functioning of the valve by pushing the *disc* (part. 3) in the direction of the flow and observing that it returns by itself once the *disc* is released. If this is not the case, check that there are no foreign bodies in the interior of the valve and repeat the operation. If the disc does not slide freely, the valve must not be installed.

In case of vibrations in the pipe it is strongly recommended to mount anti-vibration elements to absorb them. Otherwise, the life of the product could be drastically reduced.

The valves are supplied at the regulation pressure requested by the customer and sealed. If a pressure other than that indicated on the nameplate is required, please contact Genebre, S.A.

4.2) Assembly

Safety valves must be mounted in a vertical position and respecting the direction of flow marked on the body by means of an arrow.

IMPORTANT:

- Do not dismantle these valves in order to install them
- Ensure that the pipe and valve thread are clean and that they are compatible (thread type)
- Apply a suitable sealer on the pipe threads and fasten the valve to the pipe taking care not to over tighten the tapered threads
- We recommend fastening the valve to the pipe using an open-ended or an adjustable spanner and by only applying force on the hexagonal area of the valve ends. It is recommended that the force applied is lower than 30 Nm
- The valve must never be assembled adjoining an elbow, reducer, valve or pump to avoid any turbulence. The minimum distance recommended between these elements is 10 times the pipe diameter (upstream), according to the standard CR 13932:2000.
- The inlet/outlet pipe must be equal to or greater than the DN of the valve.
- The safety valve must not withstand any effort generated by the outlet pipe (discharge) and it must be as short and direct as possible.

5) Operating Instructions

5.1) Use

Safety valves are mainly used to protect equipment from overpressure. The material from which the valve body and the rest of components are made must be compatible with the fluid circulating through the valve; otherwise, the valve may become seriously damaged.

5.2) Operation

This type of valve, by definition, does not require operating. The valve opens and closes automatically depending on the pressure. If you want to know the valve's regulation pressure, check the nameplate on the valve body.

6) Maintenance Instructions

Genebre, S.A. is not responsible for those valves that have been manipulated by unauthorized persons.

Every safety valve must have a maintenance program.

Program a monthly visual inspection.

In the case of safety valve with lifting lever (ref. 2253 and 2257), operate it under pressure at least once a year to ensure that the valve is not stuck.

The guarantee is cancelled in the event of a broken seal.

7) Health and Safety

7.1) The fluids that pass through a valve can be corrosive, toxic, flammable or of a contaminating nature. They can also be found at very high or low temperature. When handling the valves, take the necessary safety measures, and it is advisable to use personal protective equipment:

- 1) Wear eye protection
- 2) Wear appropriate gloves and work clothes
- 3) Wear safety shoes
- 4) Wear a helmet
- 5) Check the availability of running water
- 6) In the case of flammable fluids, ensure that the appropriate extinguisher is available

7.2) Before removing a valve from any piping, always ensure that the line is completely cold, drained and depressurised.

7.3) Any valve that has been used in toxic services must have a certificate of cleaning before it is handled.

7.4) Any type of repair or maintenance should be performed in ventilated places.