

1 Description

1.1 Intended use

The adjustable gauge protector serves as a protection against excess pressures exceeding the measurement range of the manometers used.

The maximum permitted inlet pressure is 600 bar for the brass type and 1000 bar for the stainless steel type.

Oil/grease-free type gauge protectors for oxygen operation (A3400...2) have a maximally permitted 250 bar operating pressure.

The maximum operating temperature is 80 °C. (or 60 °C for the A3400...2 types).

Use beyond these limits and any unauthorised modifications are not permitted and relieve the manufacturer from liability for any consequential damage that may arise.

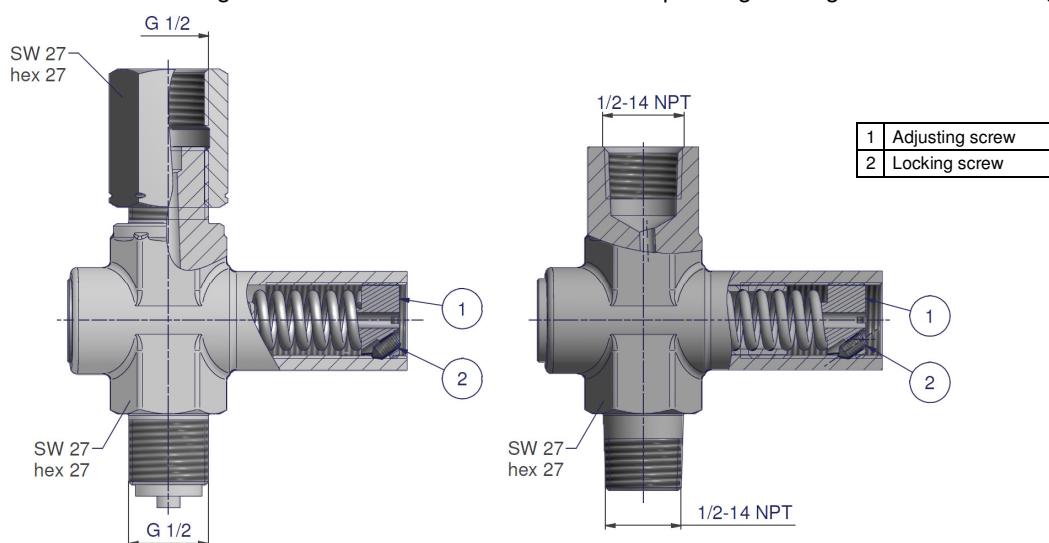
Material suitability:

It must be particularly ensured that the materials used for the medium contacting parts of the gauge protector are suitable for the media used. The manufacturer cannot be held responsible for damage to the gauge protector caused by corrosive media.

Failure to comply with these precautions can endanger the user and cause damage to the piping system.

1.2 Information about the pressure equipment

The permissible operating pressure depends on the temperature of the medium and on the materials and sealings used. This can be found in the corresponding catalogue sheet or drawing.



1.3 Labelling

- Material
- Charge/molten mass
- Factory assessor
- Company logo
- Direction arrow
- Pressure rating class (nominal pressure)
- Article number
- Set range [in bar]

Additionally with DVGW type:

- Date of manufacture encrypted
- DVGW test mark with code letter G

2 Transportation and storage

The gauge protector must only be stored in its original packaging to avoid contamination or damage. The gauge protector must only be transported in depressurised state.

3 Assembly

3.1 Installation requirements

The following installation conditions apply to the gauge protector:

The gauge protector must be installed such that employees or third parties are not endangered. The safety distances required by the relevant national statutory provisions applicable in the country of installation are to be observed.

The gauge protector must be installed or mounted such that

- it is accessible for any necessary inspection and is clearly visible.
- the labelling is clearly legible
- operation of the gauge protector is possible from a safe position

The gauge protector must be protected from outside mechanical influences in such a way that no damage to it is to be expected. The gauge protector must be protected from tampering by unauthorised persons.

3.2 Connecting the gauge protector

The gauge protector must be connected via the inlets and outlets provided. Additional introduction of forces, bending strains applied to the female connectors via piping connections must be strictly avoided. Weld seams on connections must be welded and tested in compliance with valid and approved welding methods. If the weld ends are made of steel, they must be painted after welding in order to avoid corrosion.

4 Commissioning

You must not carry out commissioning until the gauge protector

- has been correctly installed in the system and
- has been inspected for correct assembly, installation conditions and safe functioning.

The pre-commissioning test must be arranged by the system operator. Any national regulations for testing applicable in the countries of installation must be complied with.

5 Operation

5.1 General Information



Series A3400... gauge protectors for manometers are used with various media. They can be poisonous, irritating or very hot. Any assembly and maintenance work must only be carried out by experienced and trained personnel.

The generally valid regulations on health and safety as well as accident prevention must be observed in addition to this operating manual and the operating instructions for the system and manometers that are used.

The gauge protector must only be operated by competent and authorised personnel.

5.2 Operating Conditions

Refer to the gauge protector drawing for the permissible operating conditions.

5.3 Operation

5.3.1 Function

When the set pressure is reached, the valve automatically closes, thus blocking off the flow to the pressure instrument. When the pressure falls approx. 25% under the closing pressure, the valve opens and again releases the flow.

5.3.2 Setting range

The gauge protectors have the following set ranges:

0.4 – 2.5 bar, 2 – 6 bar, 5 – 25 bar, 20 – 60 bar, 50 – 250 bar, 240 – 400 bar and 400 – 600 bar

The 400 - 600 bar set range is not available for the DVGW type.

The oil/grease-free type for oxygen operation has the following set ranges:

0.4 – 2.5 bar, 2 – 6 bar, 5 – 25 bar, 20 – 60 bar and 50 – 250 bar

5.3.3 Setting the closing pressure

The factory setting for the gauge protectors is the mean figure of the respective pressure range. If requested, the gauge protectors can be pre-set to a different pressure.

If appropriate measurement equipment is available, the adjusting screw (1) can be used to set the gauge protector within the respective pressure range.

To do this, proceed as follows:

- Slacken the locking screw (2).
- Set the required pressure using the adjusting screw (1). (pressure increase by turning clockwise)
- Re-tighten the locking screw (2).

6 Maintenance

6.1 General Information



The locking screw must not be removed in view of the setting pressure!

You must not dismantle the gauge protector!

6.2 Maintenance and repair

You must check the gauge protectors regularly for tightness and damage.



Worn or damaged gauge protectors cannot be repaired by the customer.

They must be returned to GeorGIN S.A. for exchange or repair.

They must only be disassembled when depressurised! Even when depressurised, the components can stay very hot for a long time! Small amounts of medium may escape during disassembly! Protective goggles and gloves must be worn!