

Oil- and grease-free variants

Order options W4001 and W4002

1 Introduction

Two additional order options are available for devices in which particularly high purity of the wetted parts is required.

2 Order option “free of oil and grease” (W4002)

In addition to the usual cleaning steps in production, the following steps are also performed:

- Before mounting, all individual parts are cleaned. All wetted surfaces are cleaned with a damp cloth (e.g. with alcohol) and then dried. This also applies to internal surfaces.
- Gloves are worn for further processing after cleaning.
- After cleaning, the internal transport of parts is done in protective bags only.
- The devices are adjusted with bottled nitrogen in order to avoid oil or dirt ingress from room air compressors. Devices with a nominal range above 400 bar are calibrated with deionised water and then dried.
- As part of our final QA inspection procedure a detailed visual inspection of all surfaces is carried out.
- For shipping, the devices are individually packed in foil bags, which are then marked accordingly.

3 Order option “free of oil and grease for oxygen” (W4001)

An increased oxygen concentration in the medium can cause oil and grease or material contaminated with oil or grease to ignite. Some materials that cannot be ignited in air also burn in oxygen. Foreign substances can also act as an additional catalyst.

If the medium is oxygen, special precautions must therefore be taken to prevent spontaneous combustion.

In addition to the measures for the additional feature “free of oil and grease” (see above), the following applies to “free of oil and grease for oxygen”:

- According to the bulletin M034-x of the BG RCI, only wetted materials that are expressly suitable or approved for use in oxygen are used.
- All oils and greases used during production (e.g. pressure transmission fluids in diaphragm seal systems or thread lubricants for internal threads) are approved by the BAM (Federal Institute for Materials Research and Testing, Germany) for use in oxygen.
- The devices are marked with a label as suitable for oxygen.