

Information sheet Enclosure protection IP68 for part-turn gearboxes

Definition

Enclosure protection IP68 only refers to the interior of the gearboxes, but not to the coupling compartments.

In accordance with EN 60529, the conditions for meeting the requirements of enclosure protection IP68 have to be agreed between manufacturer and end user.

According to AUMA definition, AUMA part-turn gearboxes in enclosure protection IP68 meet the following requirements:

- IP68, continuous immersion up to 8 m head of water with time limitation (standard)
- IP68-20, continuous immersion up to 20 m head of water with time limitation (option)

General notes

For instructions on mounting the gearboxes to valves, please refer to the pertaining operation instructions.

Continuous immersion in aggressive media such as acids or alkaline solutions is not permissible.

If continuous or repeated immersion of the gearboxes is likely, higher KX corrosion protection should be applied.

Gearboxes in version IP68 are supplied with pointer cover (characteristic "Z") fitted in the factory (with mechanical position indicator).

Gearboxes in version IP68-20 are supplied with protection cover (characteristic "SD") fitted in the factory (without mechanical position indicator). On request, gearboxes in version IP68-20 can additionally be fitted with sealed pointer cover (characteristic "ZD").

Subsequent replacement of pointer cover (characteristic standard "Z" or sealed "ZD") with protection cover (characteristic "SD") is possible.

Instructions for mounting to valve with perpendicular valve shaft (e.g. ball valve)

For horizontal outdoor installation with perpendicular valve shaft (fig. 1) of the gearboxes, a sealed pointer cover (characteristic "ZD") must be used. The cover serves as additional sealing with a gasket between pointer cover and worm wheel to prevent ingress of water or humidity to the coupling compartment (provided that the flange surfaces between valve and gearbox are sealed).

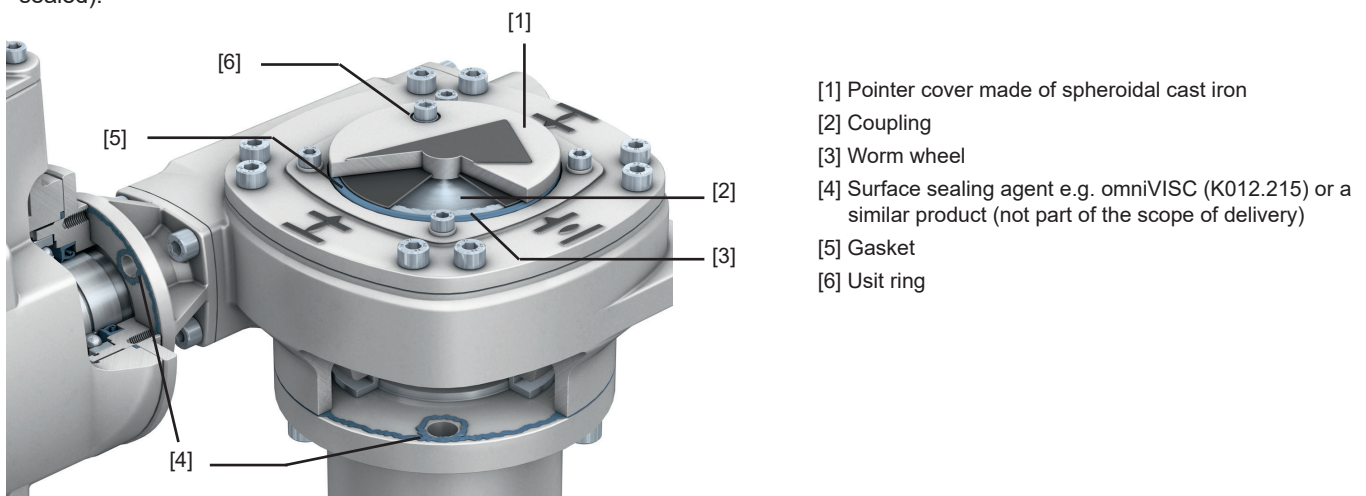


Fig. 1: GS 80.3 – SA 07.2 horizontal mounting position

Notes for part-turn gearboxes with base and lever

Base and lever components have not been designed for underwater use. After continuous immersion, the coupling compartment has to be expertly cleaned, dried up and rust removed.

Instructions for use in buried service

Gearboxes for buried service must be ordered with protection cover (characteristic "SD").

Instructions for use in drinking water applications

For gearboxes used in drinking water applications, we recommend the higher corrosion protection KX.

Notes for applications on gas pipelines

For applications on gas pipelines, a sealed pointer cover with air vent valve (characteristic "ZD-M10-V") must be used. to avoid building up of overpressure within the gear housing (coupling compartment).

Information sheet Enclosure protection IP68 for part-turn gearboxes**Notes for continuous underwater use applications**

The gearboxes are generally not designed for continuous underwater use. To be able to use the gearboxes underwater, specific characteristics have to be selected during sizing. Furthermore, special measures must be observed during assembly/installation. It must be ensured that neither the output drive sleeve nor the hollow shaft might be exposed to water.

Gearbox version:

- Corrosion protection KX-P1.004 (Input shaft made of stainless steel and coated coupling)
- With protection cover (characteristic "SD", no mechanical position indicator)
- F06 lubrication grease (gearbox housing filled with grease)

Assembly instructions:

- For version with flange-mounted actuator (SA-UW version): Seal flange interfaces between actuator/gearbox with suitable surface sealing agent.
- Apply sufficient quantity of grease to coupling/valve shaft (e.g. copper paste) or completely spray with CorrosionX HD.
- Seal flange interface between actuator/gearbox with suitable surface sealing agent¹ (Plug-in coupling or worm wheel must not come into contact with water)

If the recommendations described above are heeded, a maximum head of water of 20 m is possible without time restriction.

For other applications not described in the information sheet, please contact AUMA.

¹ e.g. with omniVISC (K012.215) or a similar product (not part of the scope of delivery)