

# Operating Instructions For ABO Swing Check Valves, Series 800

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**1. Introduction**

ABO swing-check valves series 800 are used to prevent return flow in the piping. The correct type and material design is determined using brochures and material data sheets, or consultations with the manufacturer.

**2. Safety Instructions**

Installation, operation and maintenance may only be performed by properly trained and instructed staff. For detailed safety regulations see the separate document, which must be read carefully before installation.

**3. Valve Identification**

The swing-check valves of series 800 are designed for clean and polluted water, heating systems and petroleum products.  
 Valve of series 800F have a body made of ductile cast iron and a flap made of stainless steel. The valve is sealed by O-rings made of EPDM (for water and hot water) or NBR (for petroleum products). Identification is as follows:  
 810F - NBR O-ring (letter "N" stamped on the valve)  
 820F – EPDM O-ring  
 Valves of series 800C have a body and flap made of galvanized steel with the materials specified on a plate attached to the body (similarly to series 800F).  
 The non-return valves of both types have the flow direction indicated on the body.

**4. Transportation and Storage**

The valves are transported and stored in the packaging from the manufacturer. The valves must be stored indoors in dry and dust-free environment at normal temperatures.

**5. Installation into Pipes**

The procedure is graphically described in the document Installation Instructions. Valve sealing surfaces are fitted with an O-ring; it is therefore necessary to use flanges with flat sealing strips, e.g. B shape according to EN 1092. Before installation it is necessary to examine:  
 - Whether the PN, DN and materials of the supplied valve correspond to the intended use,  
 - Whether no damage occurred during transportation. Do not use damaged valves!  
 - Check the correct function of the valve (full opening and closing).  
 - Counter-flanges must be aligned and parallel; any impurities and solid particles from the flanges and piping must be removed.  
 The arrow on the body marks the direction of the flow.  
 The flanges may not be welded on an installed valve!

**6. Pipe Pressure Test**

The valve is pressurized by the manufacturer. When fitted in the pipeline the entire pipe section with valves needs to be pressurized. The following must be observed:  
 - newly installed section must be carefully rinsed (in the direction indicated by the arrow on the valve) and cleaned to remove any mechanical impurities,  
 - pressurise in the direction of the arrow to 1.5 times the PN.

**7. Operation and Maintenance**

Swing-check valves work automatically and are maintenance free. They must be monitored during operation for leaks, corrosion, etc.

**8. Troubleshooting.**

In case of failure and repair it is necessary to observe all safety rules – see the separate document Safety Regulations.

Failure	Measure
Leakage between the valve and flange	Tighten the flange bolts. If leakage continues, the O-rings in the valve body must be replaced.
Closure leakage	Replace the valve O-ring and send it to the manufacturer.