Reverse Rinsing Actuator

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A reverse rinsing interval of 45 days is set during manufacture.
4. Fitting Batteries and Fuses
The batteries provide a power supply to close the ball valve in compliance with regulations if the mains current fails during the reverse rinsing cycle.

- Batteries are not supplied with the appliance.

4.1 Pull out the electrical mains plug
4.2 Unscrew the housing screws and remove the lid.
4.3 Insert the batteries (Four LR 6 - 1.5 V - Mignon/AA size alkali-manganese)
4.4 Change fuses if necessary
4.5 Reassemble in reverse order.

⚠️ Do not leave the mains unplugged for too long when batteries are fitted.

5. Setting of the Reverse Rinsing Interval

- DIN 1988 requires that a reverse rinsing cycle must occur at intervals of not more than two months. The time interval should be set according to the level of contamination present.

Setting of Other Intervals
- Select required interval from the table 1 on the housing cover
- Press pushbutton 2 until the required programme appears on display 3
- Display 5 indicates the number of completed reverse rinsing cycles. This number can be reset by briefly pressing pushbutton 4.

After electrical power has failed, when it is restored a reverse rinsing cycle will automatically occur. The set timed programme and counter reading are retained. Counter 5 can be reset to 0 by pressing reset button 4.

Manual Actuation of the Reverse Rinsing Reset - press pushbutton 4 for five seconds

2. Assembly
2.1 Close isolating valves 1 and 2.
2.2 Open the ball valve on the filter by turning the reverse rinsing knob.
   - The marker bar must be vertical.
   - Check availability of a suitable drainage outlet or catchment vessel.
2.3 Pull off the reverse rinsing knob on the filter
2.4 Fit the automatic reverse rinsing actuator with the bayonet connector
   - Plug in the Z 11 S
   - Push the housing in the direction of the filter against the ball valve and at the same time firmly restrain filter and turn the housing through 90°.
2.5 Plug in the mains plug.

⚠️ This will cause a reverse rinsing cycle to occur.

3. Reverse Rinsing Water Drainage
3.1 Direct Connection
Connect drainage according to DIN 19886 or to national standards.

⚠️ Drainage connection must have a minimum cross section ‘A’ as indicated in table below to prevent overflow from the pipework.

<table>
<thead>
<tr>
<th>Filter size</th>
<th>Diameter pipe A*</th>
<th>Transition Connector B</th>
<th>Reverse Rinsing Quantity (litres**)</th>
<th>C mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8&quot; + 1/4&quot;</td>
<td>DN 70</td>
<td>DN 50/70</td>
<td>Approx. 12</td>
<td>300</td>
</tr>
<tr>
<td>1&quot; + 1 1/4&quot;</td>
<td>DN 70</td>
<td>DN 50/70</td>
<td>Approx. 15</td>
<td>300</td>
</tr>
<tr>
<td>1 1/2&quot; + 2&quot;</td>
<td>DN 70</td>
<td>DN 50/70</td>
<td>Approx. 18</td>
<td>300</td>
</tr>
</tbody>
</table>

* All necessary pipes and tundish (3 X 90° bends)
** At 4.0 bar operating pressure and 25 second reverse rinsing duration

⚠️ When our drain connector is used, the free 20 mm discharge dimension required in DIN 1988 is integral with the connector.

3.2 Discharge into existing floor drainage
Service Indicator Displays
If programme pushbutton 2 and reset pushbutton 4 (for five seconds) are pushed at the same time, the remaining time to the next timed reverse rinsing cycle is indicated on 3 and display 5 will indicate the corresponding time interval between reverse rinsing cycles (0 = minutes, 1 = hours and 2 = days).

6. Additional connection options
6.1 Remote switching
The Z 11 S can be remotely actuated by:
a) A volt-free switching circuit (e.g. Honeywell Centra Bürkle type REL 2)
b) Via an open-collector output.
   In both cases the minimum holding period is one second. Reverse rinsing occurs when the inputs “Start” and “U+” have been separated.
6.2 Remote monitoring
For remote monitoring of the open/closed position of the ball valve the installation of a building management system with 0 to 10V input is recommended. The maximum current is 10 mA. With a current of 0.5 V the ball valve is open and with a value between 5 V and 6 V the ball valve is closed.
6.3 Differential pressure switch
The reverse rinsing function can be actuated according to demand using the DDS 76 differential pressure switch with voltage free switching. It is recommended that the differential pressure be set to 1.0 bar. Operation occurs when the inputs “Start” and “U+” have been separated, that is, after the differential pressure has fallen below the set value. Through this it is guaranteed that a maximum quantity of water is available for reverse rinsing. If reverse rinsing starts immediately irrespective of the duration of the differential pressure signal, then the inputs should be connected instead to “U+” and “SIGN”.
   The DDS 76 differential pressure switch can only be used where F 76 S fine filters are also installed.

7. Safety Guidelines
7.1 Use appliance only:
   - In good condition
   - According to regulations
   - With due regard to safety
7.2 Follow installation instructions
7.3 Immediately rectify any malfunctions which may influence safety.
7.4 The Z 11 S automatic reverse rinsing actuator is exclusively for use in reverse rinsing applications with Honeywell Braukmann filters and filter combinations. Any variation from this or other use will not comply with requirements.
   △ All electrical work must be carried out by authorised specialists and comply with local regulations.
   △ Materials containing solvents must not be used for cleaning.
   △ For safety reasons it is required that a fuse be fitted to protect the electrical junction box.

8. Technical Data
The appliance is fitted with electrical suppression during manufacture.

<table>
<thead>
<tr>
<th>Nominal voltage</th>
<th>Version A = 230 V ~</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Version B = 24 V ~</td>
</tr>
<tr>
<td>Frequency</td>
<td>50 / 60 Hz</td>
</tr>
<tr>
<td>Electrical consumption</td>
<td>10 W</td>
</tr>
<tr>
<td>Supply cable</td>
<td>1,5 m</td>
</tr>
<tr>
<td>Battery life</td>
<td>Approximately 3 years</td>
</tr>
<tr>
<td>Fuse</td>
<td>800 mA / F</td>
</tr>
<tr>
<td>Reverse rinsing duration</td>
<td>Approximately 25 s with mains electricity</td>
</tr>
<tr>
<td>Reverse rinsing quantity</td>
<td>See table 3.1</td>
</tr>
<tr>
<td>Ambient conditions</td>
<td>5 ... 90 % humidity; 0 ... 60 °C</td>
</tr>
<tr>
<td>Type of protection</td>
<td>IP 55 water vapour protected</td>
</tr>
<tr>
<td>Protection class</td>
<td>(DIN VDE 0700-T1 / EN 60335-1)</td>
</tr>
<tr>
<td>Approx. dimensions</td>
<td>Width: 70 mm</td>
</tr>
<tr>
<td></td>
<td>Depth: 160 mm</td>
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