ACO JUNIOR®

Backflow floor drain

The ACO JUNIOR® is a Type 5 anti-flooding device for grey water application and conforms to BS EN 13564. Compact construction makes this backflow gully ideal for new build or refurbishment projects.

The award winning design incorporates backflow protection featuring two gravity closure devices one of which is an emergency seal which can be operated manually.

Versatile design

The ACO JUNIOR® installs into solid floor construction and connects to 110mm Ø drain pipe. An optional 50mm Ø back inlet allows connection from an appliance, shower or basin.

Reliable function

When backflow occurs, reversing the direction of flow, water reaches the primary flap and forces it shut. The secondary flap provides additional safety.

The manually operated emergency seal incorporated into the second flap provides the option to shut off the pipe system for additional security or where long periods of non-use may result in evaporation of the foul air trap allowing the drain to vent foul odours.

Key features

- Compact design with double flap security
- 147mm to 277mm outlet invert range
- 60mm water seal
- Manual flap lock prevents venting through trap
- Tile top rotates and height adjusts
- Top access foul air trap and sludge bucket
- All parts removable for cleaning
- Multi-fit 50mm back inlet option for additional connection
**Technical**

ACO JUNIOR® backflow floor drain

- Double backflow flaps with manual locking
- Grating, body and internals injected molded ABS and PP plastics
- Foul air trap with 60mm water seal
- Sludge trap
- Removable grating 197mm x 197mm Load Class K3 to BS EN 1253
- Connection, 110mm pipe
- Flow, 1.6l/s
- Weight, 1.2kg

**Ordering**

<table>
<thead>
<tr>
<th>Reference</th>
<th>Ø (mm)</th>
<th>Part No</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACO Junior</td>
<td>110</td>
<td>105602</td>
</tr>
<tr>
<td>Back inlet option (Multi-fit)</td>
<td>50</td>
<td>105603</td>
</tr>
<tr>
<td>Seals maintenance kit</td>
<td>-</td>
<td>105607</td>
</tr>
</tbody>
</table>

---

ACO Building Drainage
ACO Business Centre, Caxton Road, Bedford, Bedfordshire MK41 0LF
Tel: 01462 816666  Fax: 01462 851490
e-mail: buildingdrainage@aco.co.uk
Website: www.acobuildingdrainage.co.uk
The ACO QUATRIX® backflow valve is an in-line Type 3 automated anti-flooding device conforming to BS EN 13564 suitable for black water connections (faecal wastewater) installed with its own access chamber.

**Versatile design**

The ACO QUATRIX®, which installs into solid floor construction with connection to 110mm and 160mm Ø drain pipe, features a height adjustable access chamber with optional DPM bonding flange. Access is gained through a reversible cover designed for tiled or cementitious floor finishes which rotates for ease of alignment with floor tiling and is fully sealed. The IP67 rated motor/valve body ideal for internal or external applications.

**Reliable function**

Under normal conditions the backflow flaps are open allowing waste water to flow to the drain. When backflow occurs, reversing the direction of flow, water will reach a certain level within the pipe activating a pressure sensor which is monitored at the control box. The motorised flap activates and shuts under pressure sounding an audible alarm accompanied by a flashing light. When backflow abates the process is reversed. In the event of a power cut, the control box has a 24 hour power back-up.

Quatrix backflow devices have a 2-position secondary flap for manual operation.
1. Locked open (normal)
2. Locked shut (for emergency use or long periods of non-use)

**Key features**

- Tested to BS EN 13564
- Backflow valve with sealed access chamber height adjustable access shaft rotates for tile alignment
- Double flap security with manual override
- Reversible access cover for tile infill or cement floor finishes
- Fits to 110mm and 160mm Ø pipes
- All parts removable for cleaning
- DPM flange option
- For internal or external applications
ACO Anti-flood Systems

Technical

ACO QUATRIX®

- Automatic backflow valve for use in black water or domestic grey water, IP67 rating
- Power operated flap and manual locking flap
- IP56 rated control box with visual and audible alarm
- Lockable access chamber adjusts for height and rotation
- Reversible access cover 300mm x 300mm Load Class K3 to BS EN 1253
- Connection Ø, 110mm and 160mm pipes
- Weight, 17kg
- 500mA passive Building Management System output interface
- Optional DPM flange

<table>
<thead>
<tr>
<th>Part No</th>
<th>DN OD (mm)</th>
<th>L mm</th>
<th>H mm</th>
<th>H1 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>620370</td>
<td>110</td>
<td>460</td>
<td>297</td>
<td>426 - 512</td>
</tr>
<tr>
<td>620371</td>
<td>160</td>
<td>500</td>
<td>272</td>
<td>426 - 512</td>
</tr>
</tbody>
</table>

Ordering

<table>
<thead>
<tr>
<th>Reference</th>
<th>Ø (mm)</th>
<th>Part No</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACO Quatrix-K with access chamber and cover</td>
<td>110</td>
<td>620370</td>
</tr>
<tr>
<td>ACO Quatrix-K with access chamber and cover</td>
<td>160</td>
<td>620371</td>
</tr>
<tr>
<td>100mm chamber extension piece (option)</td>
<td>110/160</td>
<td>620381</td>
</tr>
<tr>
<td>DPM flange (option)</td>
<td>110/160</td>
<td>620382</td>
</tr>
</tbody>
</table>

ACO Building Drainage
ACO Business Centre, Caxton Road, Bedford, Bedfordshire MK41 0LF
Tel: 01462 816666   Fax: 01462 851490
e-mail: buildingdrainage@aco.co.uk
Website: www.acobuildingdrainage.co.uk
ACO QUATRIX®

Backflow valve

The ACO QUATRIX® backflow valve is an in-line Type 3 automated anti-flooding device conforming to BS EN 13564 suitable for black water connections (faecal wastewater) installed into site-built access chambers or wall mounted applications.

Versatile design

The ACO QUATRIX® plain backflow valve can connect to 110mm and 160mm Ø drain pipe. This Quatrix model with IP67 rated motor/valve body, has no fitted access chamber making it ideal for installations with deep invert pipework requiring operative access within a brick built access chamber for internal or external applications.

Reliable function

Under normal conditions the backflow flaps are open allowing waste water to flow to the drain. When backflow occurs, reversing the direction of flow, water will reach a certain level within the pipe activating a pressure sensor which is monitored at the control box. The motorised flap activates and shuts under pressure sounding an audible alarm accompanied by a flashing light. When backflow abates the process is reversed. In the event of a power cut, the control box has a 24 hour power back-up.

Quatrix backflow devices have a 2-position secondary flap for manual operation.

1. Locked open (normal)
2. Locked shut (for emergency use or long periods of non-use)

Key features

- Tested to BS EN 13564
- Wall mounted or access chamber installation
- Fits to 110mm and 160mm Ø pipes
- Double flap security with manual override
- All parts removable for cleaning and replacement
- For internal or external applications
ACO Anti-flood Systems

Technical

ACO QUATRIX®

- Automatic backflow valve for use in black water or domestic grey water, IP67 rating
- Power operated flap and manual locking flap
- IP56 rated control box with visual and audible alarm
- Mains supply with 24 hour battery back-up
- Connection Ø, 110mm and 160mm pipes
- Wall mounted or self-build chamber
- 500mA passive Building Management System output interface
- Weight: 8kg

<table>
<thead>
<tr>
<th>Part No</th>
<th>DN OD (mm)</th>
<th>L mm</th>
<th>H mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>620368</td>
<td>110</td>
<td>460</td>
<td>381</td>
</tr>
<tr>
<td>620369</td>
<td>160</td>
<td>500</td>
<td>381</td>
</tr>
</tbody>
</table>

Ordering

<table>
<thead>
<tr>
<th>Reference</th>
<th>Ø (mm)</th>
<th>Part No</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACO Quatrix-K automatic</td>
<td>110</td>
<td>620368</td>
</tr>
<tr>
<td>ACO Quatrix-K automatic</td>
<td>160</td>
<td>620369</td>
</tr>
</tbody>
</table>

Control box (117mm wide x 180mm high x 75mm deep)

Connections to backflow unit

Mains supply (230V, 0.5A)

Motor

Manual lock

Fully sealed cover

Double backflow flaps

Ribbed casing for casting-in

110mm & 160mm pipes

ACO Anti-flood Systems

ACO Building Drainage
ACO Business Centre, Caxton Road, Bedford, Bedfordshire MK41 0LF
Tel: 01462 816666   Fax: 01462 851490
e-mail: buildingdrainage@aco.co.uk
Website: www.acobuildingdrainage.co.uk
ACO Anti-flood Systems

ACO TRIPLEX®

Backflow valve with access chamber

The ACO TRIPLEX® access backflow valve is an in-line Type 2 passive anti-flooding device conforming to BS EN 13564 suitable for grey water connections (non faecal wastewater) installed with its own access chamber.

Versatile design

The ACO TRIPLEX®, which installs into solid floor construction and connects to 110mm and 160mm Ø drain pipe, features a height adjustable access chamber with optional DPM bonding flange. Access is gained through a reversible cover designed for tiled or cementitious floor finishes which rotates for ease of alignment with floor tiling and is fully sealed.

Reliable function

Under normal conditions the backflow flaps simply open by the force of waste water flowing to the sewer. When backflow occurs, reversing the direction of flow, water reaches the primary flap and forces it shut.

The secondary flap provides additional safety to ensure that backflow is prevented if the first flap should fail to close properly due to presence of dirt.

The top lever incorporated into the primary flap provides the option to manually shut off the pipe during maintenance or for long periods of non-use.

Key features

- Tested to BS EN 13564
- Backflow valve with sealed access chamber height adjustable access shaft rotates for tile alignment
- Double flap security with manual override
- DPM flange option
- Reversible access cover for tile infill or cement floor finishes
- All parts removable for cleaning and replacement
- Fits to 110 and 160 Ø pipes
- For internal or external applications
ACO Anti-flood Systems

Technical

ACO TRIPLEX®

- Passive backflow valve
- For use in grey water (non-faecal)
- Double flaps with manual locking
- Access chamber adjusts for height and rotation
- Reversible cover 300mm x 300mm Load Class K3 to BS EN 1253
- Connection Ø, 110mm and 160mm pipes
- Weight, 12kg
- Optional DPM flange & chamber extension

<table>
<thead>
<tr>
<th>Part No</th>
<th>DN OD (mm)</th>
<th>L mm</th>
<th>H mm</th>
<th>H1 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>620366</td>
<td>110</td>
<td>460</td>
<td>297</td>
<td>393 - 512</td>
</tr>
<tr>
<td>620367</td>
<td>160</td>
<td>500</td>
<td>272</td>
<td>393 - 512</td>
</tr>
</tbody>
</table>

Ordering

<table>
<thead>
<tr>
<th>Reference</th>
<th>Ø (mm)</th>
<th>Part No</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACO Triplex-K-2 with access chamber and cover</td>
<td>110</td>
<td>620366</td>
</tr>
<tr>
<td>ACO Triplex-K-2 with access chamber and cover</td>
<td>160</td>
<td>620367</td>
</tr>
<tr>
<td>100mm chamber extension piece (option)</td>
<td>110/160</td>
<td>620381</td>
</tr>
<tr>
<td>DPM flange (option)</td>
<td>110/160</td>
<td>620382</td>
</tr>
</tbody>
</table>

ACO Building Drainage
ACO Business Centre, Caxton Road, Bedford, Bedfordshire MK41 0LF
Tel: 01462 816666   Fax: 01462 851490
e-mail: buildingdrainage@aco.co.uk
Website: www.acobuildingdrainage.co.uk
The ACO TRIPLEX® backflow valve is an in-line Type 2 passive anti-flooding device conforming to BS EN 13564 suitable for grey water connections (non faecal wastewater) installed into site built access chambers or wall mounted applications.

**Versatile design**
The ACO TRIPLEX® plain backflow can connect to 110mm and 160mm Ø drain pipe. This plain Triplex model has no fitted access chamber making it ideal for installations with deep invert pipework requiring operative access within a brick built access chamber.

**Reliable function**
Under normal conditions the backflow flaps simply open by the force of waste water flowing to the sewer.

When backflow occurs, reversing the direction of flow, water reaches the primary flap and forces it shut.

The secondary flap provides additional safety to ensure that backflow is prevented if the first flap should fail to close properly due to presence of dirt.

The top lever incorporated into the primary flap provides the option to manually shut off the pipe during maintenance or for long periods of non-use.

**Key features**
- Tested to BS EN 13564
- Wall mounted or access chamber installation
- Use with built access chambers
- Fits to 110mm and 160mm Ø pipes
- Double flap security with manual override
- All parts removable for cleaning and replacement
**Technical**

ACO TRIPLEX®

- Passive backflow valve
- For use in (non faecal) grey water
- Double flaps with manual locking
- Connection Ø, 110mm and 160mm pipes
- Weight, 3.5kg

**Ordering**

<table>
<thead>
<tr>
<th>Reference</th>
<th>Ø (mm)</th>
<th>Part No</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACO Triplex-K-2 plain</td>
<td>110</td>
<td>620364</td>
</tr>
<tr>
<td>ACO Triplex-K-2 plain</td>
<td>160</td>
<td>620365</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part No</th>
<th>DN OD (mm)</th>
<th>L mm</th>
<th>H mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>620364</td>
<td>110</td>
<td>460</td>
<td>338</td>
</tr>
<tr>
<td>620365</td>
<td>160</td>
<td>500</td>
<td>338</td>
</tr>
</tbody>
</table>