

# 551 DISCALSLIM<sup>®</sup>

de-aerator



# 551 DISCALSLIM® de-aerator



## Application

DISCALSLIM® de-aerators are designed for continuous venting of the air that forms in hydraulic circuits, down to the level of micro-bubbles (gradual and continuous degassing).

The de-aerator may be installed on either a vertical or horizontal pipe.

The circulation of fully de-aerated water enables equipment to operate under optimum conditions, free from any noise, corrosion, localised overheating or mechanical damage, important for reducing energy demands and on going running costs.

Patent pending.

To minimise heat gain or loss insulation shells are available for both horizontal and vertical installations.

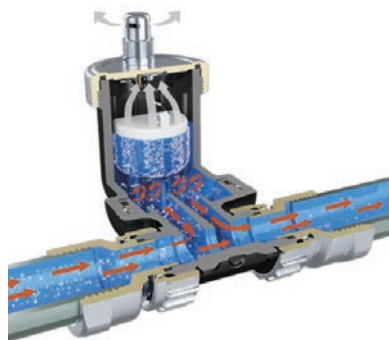
## Construction Details

| Component   | Material            | Grade              |
|-------------|---------------------|--------------------|
| Body        | Technopolymer       | PPAG40             |
| Float       | Technopolymer       | PP                 |
| Float guide | Brass               | BS EN 12164 CW614N |
| Stem        | Brass               | BS EN 12164 CW614N |
| Float lever | Stainless Steel 302 | BS EN 10270-3      |
| Spring      | Stainless Steel 302 | BS EN 10270-3      |
| Seals       | EPDM                |                    |

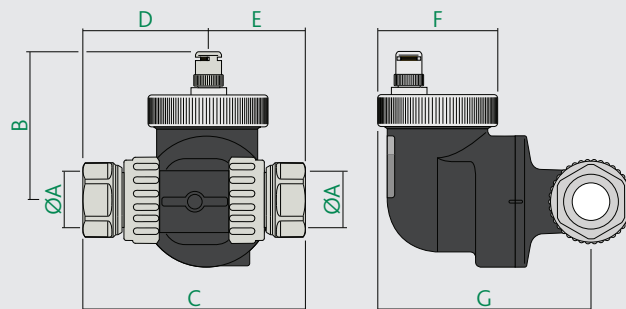
## Technical Data

|                             |                        |
|-----------------------------|------------------------|
| Medium:                     | Water - glycol mixture |
| Maximum glycol percentage:  | 30%                    |
| Maximum pressure:           | 3 bar                  |
| Maximum discharge pressure: | 3 bar                  |
| Maximum temperature range:  | 0 to 110°C             |
| Compression ends:           | BS EN1254-2            |
| Air vent                    | hydropscopic cap       |

## Operating Principle



## Dimensions



| Code   | A  | B  | C   | D    | E    | F  | G   | kg   |
|--------|----|----|-----|------|------|----|-----|------|
| 551802 | 22 | 71 | 72  | 42   | 30   | 56 | 101 | 0.60 |
| 551805 | G¾ | 71 | 105 | 58.5 | 46.5 | 56 | 101 | 0.64 |
| 551806 | G1 | 71 | 118 | 65   | 53   | 56 | 101 | 0.77 |

## Operating Principle

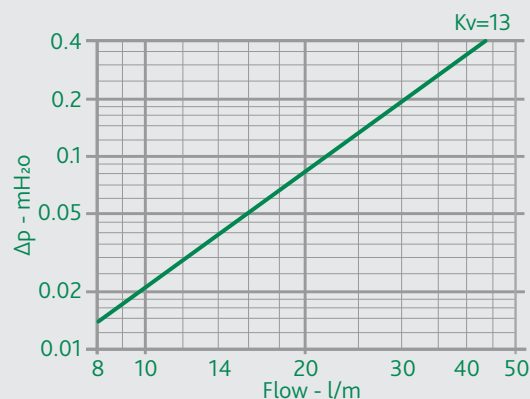
As water enters the DISCALSLIM® some of the water is diverted into the de-aerator chamber where the flow velocity reduces and releases some of the air into the air collection chamber.

When the pump is switched off and the pressure falls below 3 bar the hydroscopic cap releases the collected air.

The operating principle of the hydroscopic safety cap is based on the properties of the cellulose fibre disks forming the retaining cartridge.

These discs increase in volume by 50% when they come into contact with water, thus closing the valve. This avoids any damage in the event of water leakage.

## Hydraulic Characteristics



| Size         | Ø22  | ¾"   | 1"   |
|--------------|------|------|------|
| Kv value     | 13   | 13   | 13   |
| Max flow l/m | 21.6 | 21.6 | 21.6 |

The maximum recommended velocity of the medium at the device connections is 1.2 m/s.

| Insulation Codes | Ø22 | ¾" | 1" |
|------------------|-----|----|----|
| Horizontal       |     |    |    |
| Vertical         |     |    |    |

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