

551 DISCALSLIM®

de-aerator



altecnic
CALEFFI group

551 DISCALSLIM® de-aerator



Application

DISCALSLIM® de-aerators are designed for continuous venting of the air that forms in air conditioning system 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	hydroscopic cap

Operating Principle



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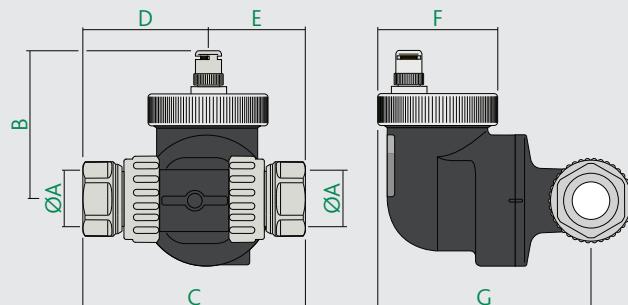
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Dimensions



Code	A	B	C	D	E	F	G	kg
551802	22	71	72	42	30	56	101	0.60
551805	G 3/4"	71	105	58.5	46.5	56	101	0.64
551806	G 1"	71	118	65	53	56	101	0.77

Operating Principle

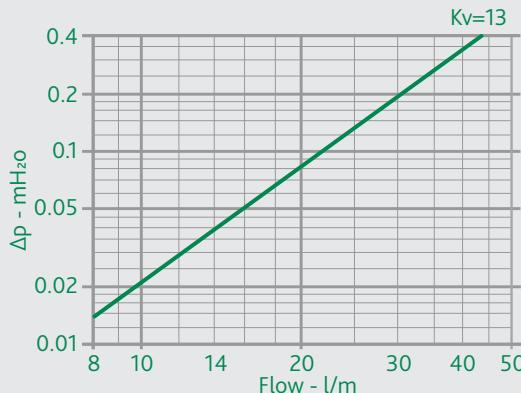
As water enters the DISCALSLIM® some of the water is diverted into the de-aerator chamber where the flow velocity reduces and releases some of the air into the air collection chamber.

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	3/4"	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	3/4"	1"
Horizontal			
Vertical			

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