

Pipe Interrupter – Type DC

Model DC257 – With Permanent Atmospheric Vent - Datasheet

Description

DC Pipe Interrupters provide Fluid Category 5 backsiphonage protection (vacuum on the supply).

Model DC15C257 is primarily for urinals – enabling flushing directly from the mains supply. Traditional flushing cisterns are not required.

Model DC15F257 can be fitted to most standard laboratory taps that have a removable nozzle with a 1/2" BSP thread.

Model DC20F257 fits to an outside tap. A **short (600 mm max) unrestricted hose** can be fitted for washing chemical toilets and similar Fluid Category 5 applications.

DC Pipe Interrupters are intended for **open outlet** applications (e.g. urinal flushing) and must not be used for washing machines, upstream of hose union taps or any appliance that has a control valve or restriction. Negligible restriction should exist downstream - otherwise water would ultimately discharge through the vent holes.

Specification

Pressure Supply	10 bar max.
Temperature	60°C max.
Water Regulations	
Approval	1506348

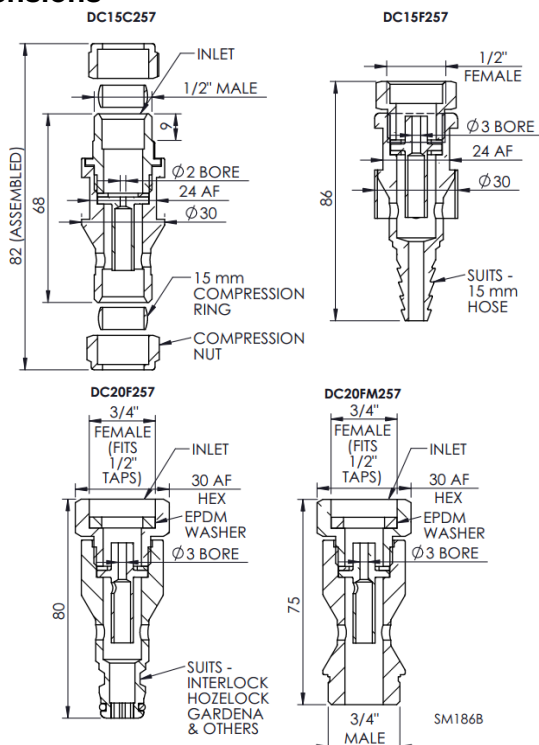
Water Regulations

The new Water Regulations allow approved DC Pipe Interrupters to be used for Fluid Category 5 Applications.

The 15 mm version is intended for urinals and Regulation Table S15.2 states – “Arrangements incorporating a type DC device shall have no control valves on the outlet of the device; they shall be fitted not less than 300 mm (150 mm with Interpretation B39) above the spillover level of a WC pan, or 150 mm above the sparge outlet of a urinal, and discharge vertically downwards.”

Model DC20F257 – see WRAS guidance for use of DC devices at caravan and camping sites. The hose outlet must be at least 150 mm below the DC device.

Dimensions



Model DC15C257

Model DC20F257

Model DC15F257

Materials

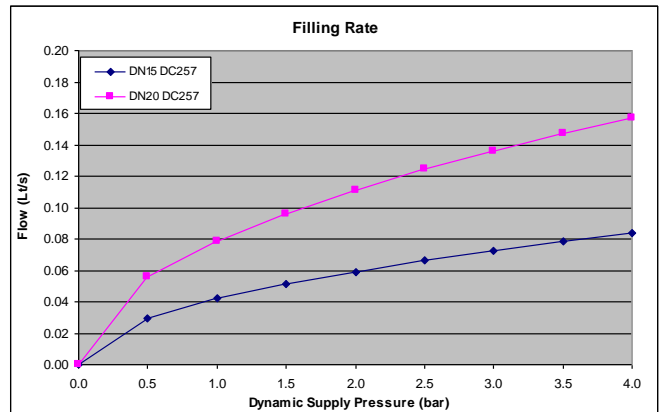
Body	Brass – (Chrome Finish on 15 mm)
Nozzle	Brass

Installation

DC Pipe Interrupters will discharge water through the vent holes if the outlet is significantly restricted or blocked. The device must be mounted vertically with the inlet at the top. Note flow direction arrow.

The device must be installed at least 300 mm (150 mm with Interpretation B39) above the highest outlet or spillover level and at least 150 mm above the outlet. **In practice, the 15 mm device generally needs to be mounted 1.0 – 2.0 m above the sparge outlet.** This creates a greater head, reducing the possibility of discharge through the vent holes.

Do not fit any valves downstream of the DC Device. The downstream pipe should be vertical and initially full bore.



Codes and Descriptions

Size	Code	Description
15 mm	DC15C257	Pipe Interrupter DC CAT5 Model 257 Comp
DN15	DC15F257	Pipe Interrupter DC for Laboratory Tap
DN20 in	DC20F257	Pipe Interrupter DC for Hose Union Tap
DN20 in	DC20FM257	Pipe Interrupter DC - 3/4" Male Outlet



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All unit-less dimensions in mm.

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“DC Filler” – DC Pipe Interrupter Assembly

Model DC257SOL – With Solenoid Filling Valve - Datasheet

Description

DC Pipe Interrupter Assembly with Solenoid Filling Valve provides Fluid Category 5 backsiphonage protection.

The DC257SOL can be used for automatic filling of Fluid Category 5 applications, such as swimming pools. The device must not be used for any application that has a control valve or restriction downstream, otherwise water would ultimately discharge through the vent holes.

The assembly includes a servicing valve with integral strainer and flow limiting cartridge. Filling is via a solenoid valve controlled by a sensor, such as the SEN108 for swimming pools (not supplied – see SEN108 Datasheet).

Connection Pipes

15 mm comp. Remove nuts to create ½” male connection. The outlet connection is for 25 MDPE, 20 MDPE or 22 mm compression (as ordered).

Specification

Pressure Supply	10 bar max.
Temperature	60°C max.
Water Regulations	1506348
Approval	(DC Pipe Interrupter only)

Materials

DC Pipe Interrupter	Brass DZR
Servicing Valve	Brass (Nickel Finish)
Mounting Bracket	Stainless Steel 304

Applications

The primary application is automatic filling of swimming pools, when used in conjunction with the Pool Filling Control Kit - model - SEN108.

The assembly can also be used to serve other open-outlet Fluid Category 5 applications such as industrial potato peeling machines.

Installation

Mount the assembly as high as reasonably possible to avoid discharge through the vent holes. Recommended height 1m. See table below for the minimum mounting height when using 25 MDPE.

25 MDPE, with 10 m unrestricted run to top-up chamber	
Cartridge Required	Height Above Outlet (minimum)
0.07 Lt/s	500 mm
0.10 Lt/s	600 mm
0.13 Lt/s	700 mm

The bracket is reversible allowing left or right hand configurations.

The servicing valve is supplied fitted with a 0.07 Lt/s flow limiting cartridge. A 0.10 Lt/s and a 0.13 Lt/s cartridge are supplied loose to suit the application.

Whilst 25 MDPE (or 22 mm copper) is recommended, it is possible to use 20 MDPE providing the assembly is mounted high enough – see table.

20 MDPE, with 10 m unrestricted run to top-up chamber	
Cartridge Required	Height Above Outlet (minimum)
0.07 Lt/s	600 mm
0.10 Lt/s	1200 mm
0.13 Lt/s	1300 mm

Note - Do not fit any valves or restriction downstream of the assembly – e.g. remove float valve in top-up chamber and replace with elbow.

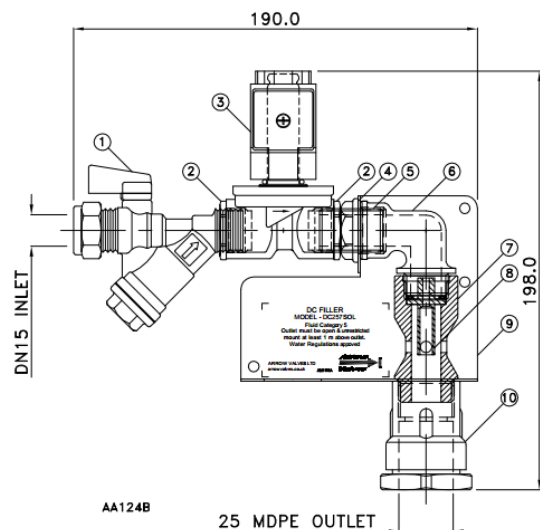


Water Regulations

The new Water Regulations allow approved DC Pipe Interrupters to be used for Fluid Category 5 Applications.

The DC257SOL is primarily intended for the automatic filling of swimming pools and Clause R31.2 states - “A pool may be replenished by automatic means providing a method of backflow prevention suitable for a fluid 5 risk is provided.”

Dimensions



Model DC257SOL-25

Codes and Descriptions

Size	Code	Description
25 mm	DC257SOL-25	DC Pipe Interrupter Filling Assy. - 25 MDPE Outlet
22 mm	DC257SOL-22	DC Pipe Interrupter Filling Assy. - 22 mm Outlet
20 mm	DC257SOL-20	DC Pipe Interrupter Filling Assy. - 20 MDPE Outlet
	SEN108	SEN108 Pool Filling Control Kit

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