

# A.R.I. DC-500

 **Aquestia**  
Directing the Flow



Waterworks

## Backflow Preventer - Double Check Valve

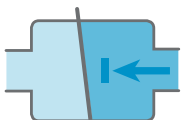
### Description

A.R.I. DC-500 is a Double Check Valve designed to provide maximum protection against backflow caused by back-siphonage or backpressure. Backflow may cause infiltration of chemicals, fertilizers and/or other pollutants into potable water systems. Comprised of two independent, easily replaceable, capsulated spring-loaded check valves.

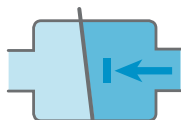
### Installation

- Chemical and fertilizer systems in landscaping and irrigation
- Swimming pools
- Small businesses
- Private homes
- According to local regulations

### Operation




Non-return 1



Non-return 2

## Features and Benefits

Easily replaceable modular parts	Simple, quick and inexpensive maintenance, low-cost repair parts
Construction materials	UV resistant, non-corrosive, scale-resistant and durable
Lightweight and compact	Quick and easy installation, fits in confined spaces
 NSF/ANSI 61 Certified & Listed	For drinking water system component
NSF/ANSI 372 Certified & listed	Conforms with lead content requirements for "lead-free" plumbing
Product standards	ASSE 1015, AWWA C510, Watermark
USC - Authorized and Approved	USC - FCCHR: Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California

## Technical Specifications

Size range	½", ¾", 1", 1 ¼", 1 ½", 2"
Working pressure range	10 bar
Testing pressure	1.5 times maximum working pressure
Temperature	Working temperature range: 0.5° to 45° C Max intermittent temperature: 45° C

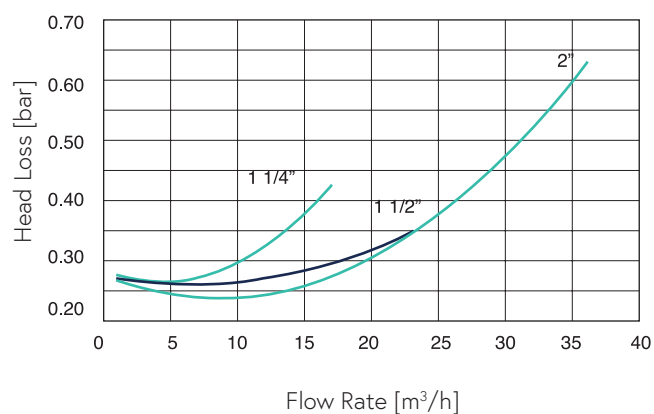
Upon ordering, please specify: model, size, working pressure, thread/flange standard and type of liquid

## Valve Selection Options

Valve connection	Threaded BSPT/ NPT
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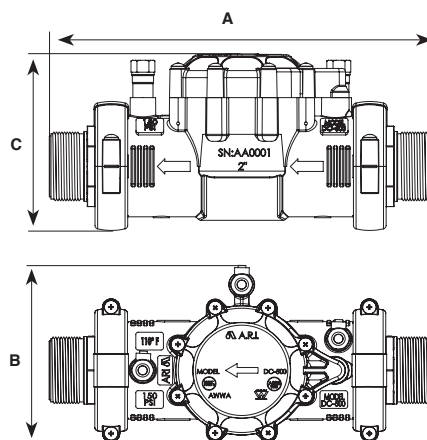
The graph shows the relationship between head loss and flow rate for three different pipe diameters. The y-axis represents head loss in bar, ranging from 0.25 to 0.60. The x-axis represents flow rate in m³/h, ranging from 0 to 14. The 1/2 inch curve starts at approximately 0.42 bar at 0 m³/h and rises to 0.49 bar at 1.5 m³/h. The 3/4 inch curve starts at approximately 0.30 bar at 0 m³/h and rises to 0.55 bar at 7 m³/h. The 1 inch curve starts at approximately 0.31 bar at 0 m³/h, dips slightly to 0.29 bar at 4 m³/h, and then rises to 0.55 bar at 12 m³/h.

Flow Rate [m³/h]	Head Loss [bar] (1/2")	Head Loss [bar] (3/4")	Head Loss [bar] (1")
0	0.42	0.30	0.31
1.5	0.49	-	-
2	-	0.32	0.30
4	-	0.38	0.29
6	-	0.48	0.33
7	-	0.55	-
10	-	-	0.45
12	-	-	0.55



Size	Dimensions (mm)			Weight
	A	B	C	(kg)
1/2" 3/4" 1"	197	100	99	0.74
1 1/4" 1 1/2" 2"	332	151	157	2.4

NOTE Dimensions and weight do not include shut-off valves and will vary, depending upon the valve type installed.



## Parts List and Specifications

No.	Part	Material
1	Cover Assembly	
1a	Bolts	Stainless Steel 304
1b	Cover	Reinforced Nylon
2	Check Valve Assembly	
2a	Inlet Check Valve	Acetal+Stainless Steel 302+EPDM
2b	Retainer	Acetal
2c	Outlet Check Valve	Acetal+Stainless Steel 302+EPDM
3	Body Assembly	
3a	Body	Reinforced Nylon
3b	Test Cocks	Lead-free Brass
3c	Band	Reinforced Nylon

