

A.R.I. NR-040 D

 **Aquestia**
Directing the Flow



Waterworks

Check Valve for Waterworks

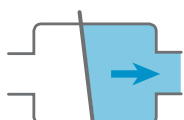
Description

A.R.I. NR-040 D is a Swing-type Check Valves designed specifically for drinking water systems, that allows for one-directional flow; preventing the return flow of liquid to its source. The valve has a triple-shaft sealing design, flexible bearings and removable lid; which makes it accurate and durable in long-term harsh conditions. The removable lid enables cleaning and maintenance without removing the valve from the pipeline.

Installation

- Pumping stations for potable water
- At consumer connections and as an isolation valve along the pipeline
- Filtration systems and water treatment facilities

Operation



One-way

> Features and Benefits

Disc anchored at two points	Prevents fluttering and turbulent flow
Removable upper cover	Easy maintenance without removing valve from the pipeline
Built from special materials	High durability in long-term, harsh conditions — withstands water hammer effects
Disc fully opens	Minimal energy loss, without pockets to catch debris
Unique seal design	Seals at low pressure, prevents wear of sealing area & coating damage
Flexible installation design	Enables both horizontal & vertical installation (upward flow only)

> Technical Specifications

Size range	3" – 40"
Working pressure range	Working pressure range: 16/25/40/64 bar Testing pressure: 1.5 times maximum working pressure
Temperature	Maximum working temperature: 90° C
Valve coating	Fusion bonded epoxy coating in compliance with standard DIN 30677-2

For best suitability, it is recommended to send the fluid chemical properties along with the valve request.

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

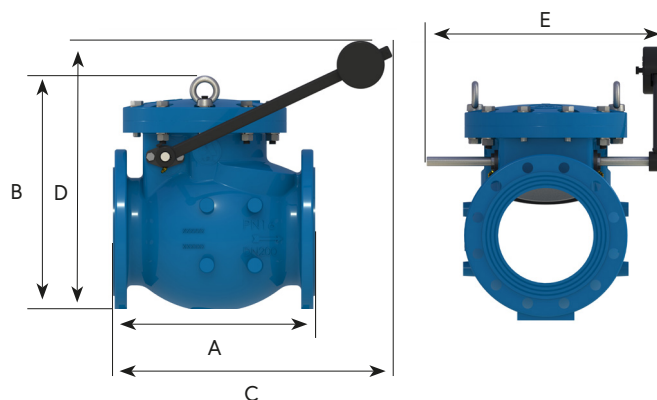
> Valve Selection Options

- Additional counterweight
- Manufactured according to any standard flange requirement
- Limit switch add-on

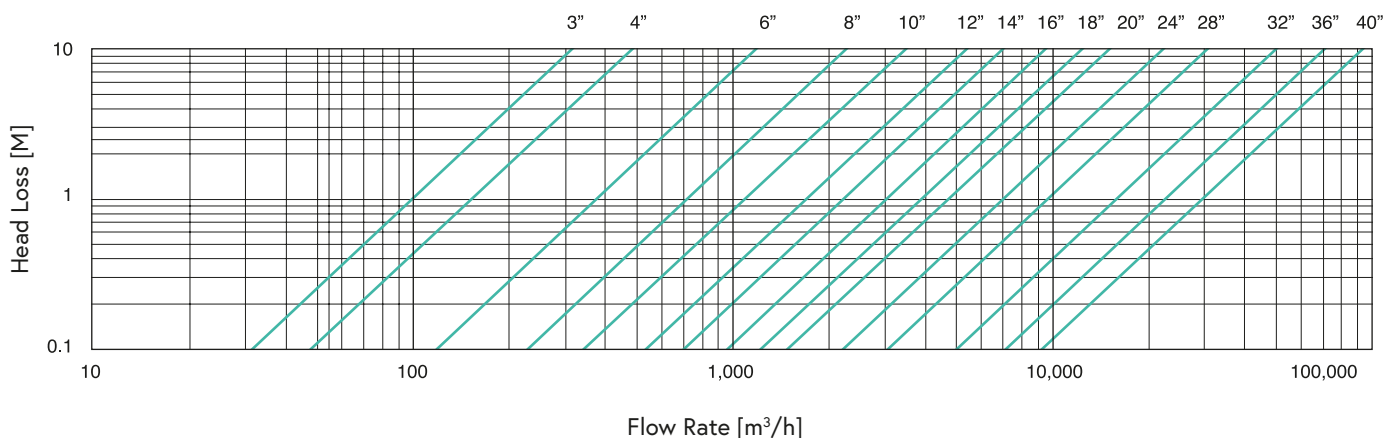
Dimensions and Weight

Size	Dimensions (mm)					Weight (kg)
	A	B	C	D	E	
3" (80 mm)	241	252	330	310	310	19.5
4" (100 mm)	262	284	324	340	328	27
6" (150 mm)	356	360	552	531	410	51
8" (200 mm)	424	450	580	600	508	98
10" (250 mm)	479	537	630	630	555	175
12" (300 mm)	553	622	624	731	605	257
14" (350 mm)	838	700	645	907	705	361
16" (400 mm)	760	734	641	842	705	373
18" (450 mm)	978	880	890	1200	885	770
20" (500 mm)	865	892	700	1110	1000	660
24" (600 mm)	1295	1150	885	1300	1135	1280
28" (700 mm)	1448	1315	1250	1700	1342	1670
32" (800 mm)	1850	1377	1400	1790	1339	2200
36" (900 mm)	1956	1507	1400	1980	1440	2349
40" (1000 mm)	2250	1680	1290	2000	1545	3350

NOTE All product weights and dimensions are approximate, due to the differences in flange standards, materials and variable accessories.



Head Loss



Parts List and Specifications

No.	Part	Material
1	Cover Assembly	
1a	Lifting Ring	Steel, Zinc coated
1b	Cover	Reinforced Nylon / Ductile Iron
2	Disc Assembly	
2a	Disc	Stainless Steel 316 + Vulcanized Rubber
2b	Stopper	EPDM
2c	Disc Arm	Stainless Steel 316
2d	Pin	Stainless Steel 316
3	Shaft Assembly	
3a	Bearing Assembly	Stainless Steel 316, EPDM / Acetal, Reinforced Nylon
3b	Shaft	Stainless Steel 316
3c	Disc Arm Key	Stainless Steel 316
3d	Counterweight Assembly	Ductile Iron
4	Body Assembly	
4a	O-ring Seal	EPDM
4b	Bolts, Nuts & Washers	Steel, Zinc coated
4c	Body	Ductile Iron / Cast Steel
4d	O-ring Seal	EPDM
4e	Seat	Stainless Steel 316
4f	Seat Bolts	Stainless Steel 316

