

A.R.I. NR-040 FS

 **Aquestia**
Directing the Flow



Wastewater

Check Valve for Wastewater

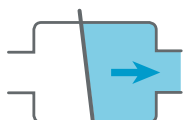
Description

A.R.I. NR-040 FS Check Valves are designed specifically for wastewater systems. It allows for one-directional flow, preventing the return flow of liquid to its source. The valve has a swing-type disc and removable lid which allows for the cleaning and maintenance of the valve without the need to remove it from the pipeline.

Installation

- Pumping stations for irrigation water, wastewater, reclaimed water and sludge.
- At consumer connections and as an isolating valve along the pipeline.
- Filtration systems and treatment facilities.

Operation



One Way

Features and Benefits

Specially built cast body	withstands effects of water hammer
Internal parts Check Valve non-corrosive materials	durable, long-term operation under harsh conditions
Removable upper cover	maintenance without need to remove valve from the pipeline
Disc anchored at two points	prevents fluttering and turbulent flow
Disc opens completely for unobstructed flow	minimal energy losses, no pockets to catch debris
Vulcanized disc seals	seals at low pressure, prevents wear of the sealing area
Rubber stoppers on disc	no contact between coated metal parts, prevents coating damage
Flexible grease-lubricated bearings	accurate positioning of the shaft while retaining free movement
Triple shaft sealing	prevents leaks
Horizontal or vertical (upward flow only) installation	flexibility in installation positions

Technical Specifications

Size Range	3" – 40"
Sealing 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

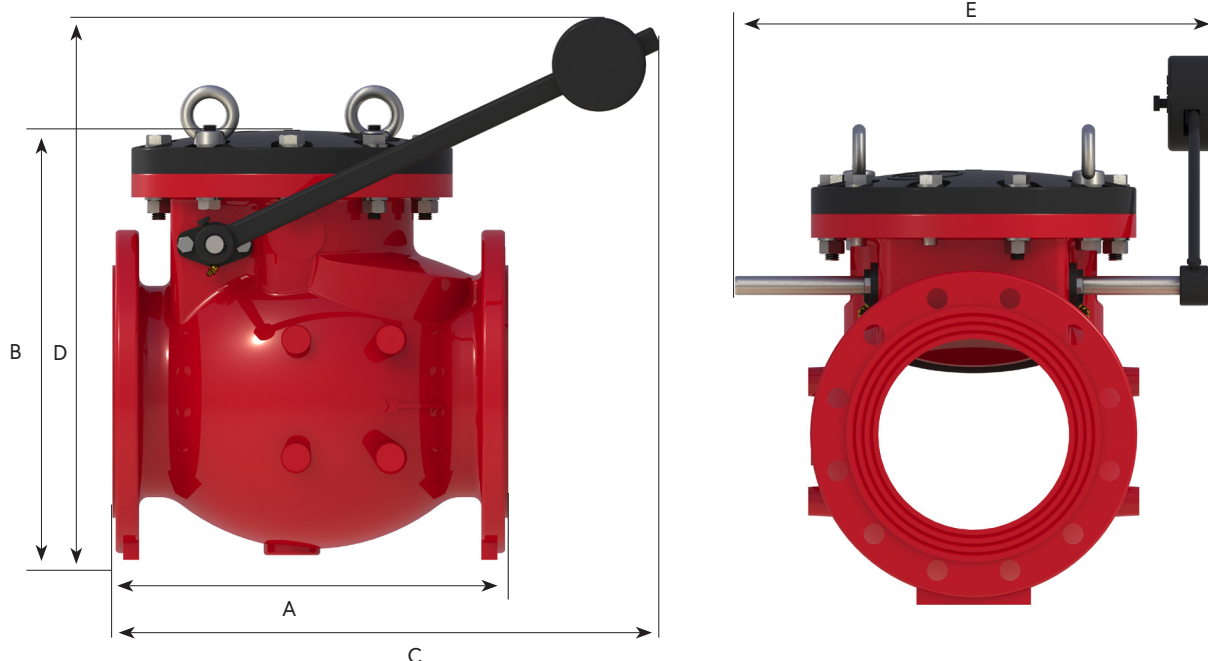
- Additional counterweight
- Manufactured according to any standard flange requirement
- Limit switch add-on:
 - NR-40 FS 3"- 4" - Model LS 403
 - NR-40 FS 6"- 12" - Model LS 406
 - NR-40 FS 14"- 16" - Model LS 414
 - NR-40 FS 18"- 40" - Model LS 420

➤ Dimensions and Weight

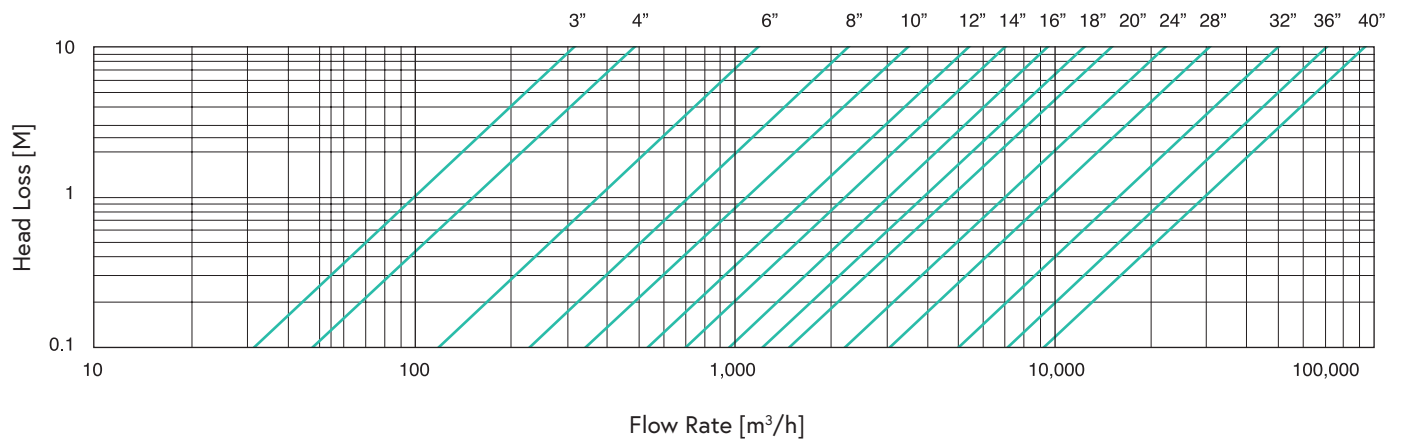
Size	Dimensions (mm)					Weight (kg)
	A	B	C	D	E	
3" (80 mm)	241	252	330	310	310	19.5
4" (100 mm)	262	284	324	340	328	27
6" (150 mm)	356	360	552	531	410	51
8" (200 mm)	424	450	580	600	508	98
10" (250 mm)	479	537	630	630	555	175
12" (300 mm)	553	622	624	731	605	257
14" (350 mm)	838	700	645	907	705	361
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

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, Bronze / Acetal, Reinforced Nylon, Brass
3b. Shaft	Stainless Steel 316
3c. Disc Arm Key	Stainless Steel 316
3d. Counter Weight 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

