

A.R.I. NR-010

 **Aquestia**
Directing the Flow



Irrigation

Wafer Style Check Valve

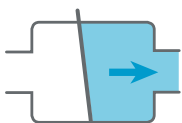
Description

A.R.I. NR-010 Check Valve allows for one-directional flow, preventing the return flow of the liquid to its source and provides quiet closure and total sealing of the sealing face.

Installation

- Downstream of pumps and boosters
- Irrigation systems
- Fertigation systems
- On intake suction pipe
- Reservoirs

Operation



One Way

Features and Benefits

UV resistant polymers, reinforced and rubber materials	Corrosion and scale resistant, long working life
Quick, spring-assisted closure	Water hammer mitigation
Specially chosen materials	Withstands highly abrasive conditions, long-term service in corrosive liquid environments
1 ½", 2" models - removable cover	Easy cleaning, maintenance and seal replacement without need to remove from the pipeline
3"- 10" models - spring assembly mechanism outside the flow	Easily maintained without need to remove from the pipeline

Technical Specifications

Size range	1½", 2" female threaded - BSPT / NPT 3"- 10" between flanges
Working pressure range	0.2 - 10 bar (sizes 1½" - 10") 0.2 - 16 bar (sizes 1½" - 8")
Temperature	Maximum working temperature: 60° C

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

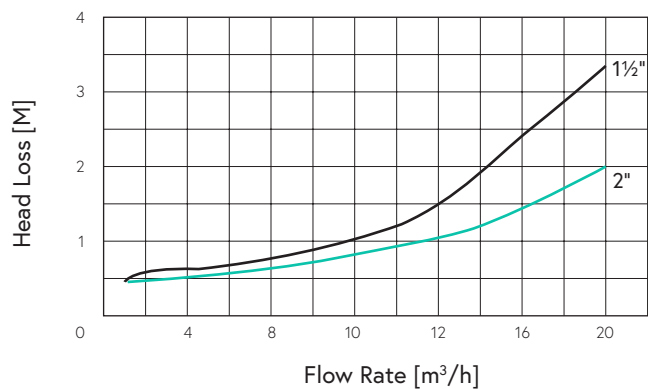
Upon ordering, please specify: model, size, working pressure, thread/flange standard and type of liquid.

Valve Selection Options

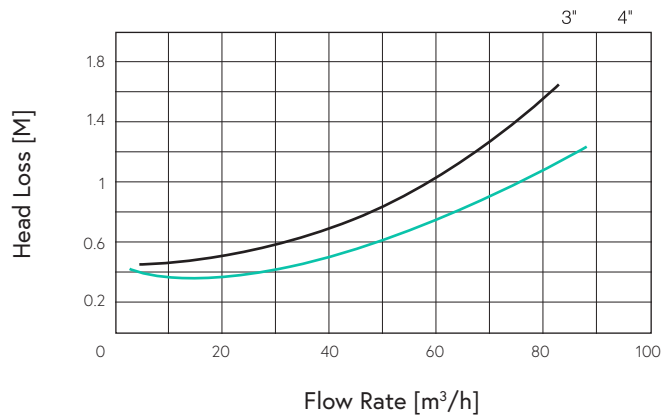
- Manufactured according to any standard flange requirement
- Limit switch add-on
- 1½", 2" model - up to four 1/8" side ports for measuring pressure / pressure release cocks / command lines for external controls
- NR-010-LS - limit switch transmits a contact signal at start or stop of flow
- NR-010-FV – foot valve with screen (3"-10")

Head Loss

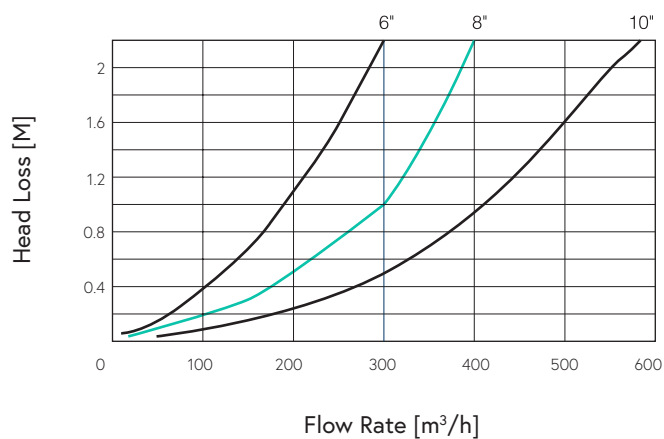
NR-010 1½", 2"



NR-010 3", 4"

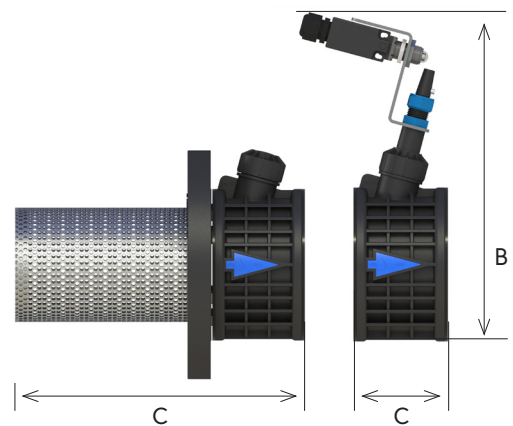
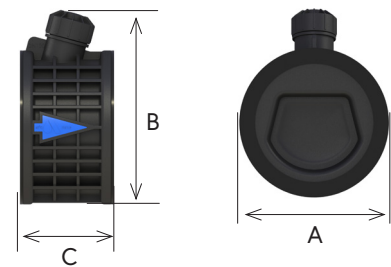
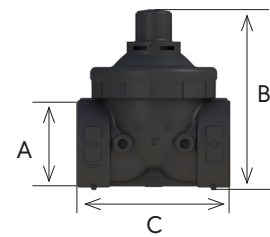


NR-010 6", 8", 10"



➤ Dimensions and Weight

Model	Dimensions (mm)			Weight (kg)
	A	B	C	
A.R.I. NR-010 1 1/2"	65	149	133	0.63
A.R.I. NR-010 LS 1 1/2"	65	258	133	0.89
A.R.I. NR-010 FV 1 1/2"	65	149	225	0.95
A.R.I. NR-010 2"	76	157	133	0.65
A.R.I. NR-010 LS 2"	76	267	133	0.92
A.R.I. NR-010 FV 2"	76	157	267	1.0
A.R.I. NR-010 3"	131	172	80	0.66
A.R.I. NR-010 LS 3"	131	308	80	0.77
A.R.I. NR-010 FV 3"	207	207	226	1.3
A.R.I. NR-010 4"	151	190	90	0.9
A.R.I. NR-010 LS 4"	151	325	90	1.17
A.R.I. NR-010 FV 4"	233	233	286	2.17
A.R.I. NR-010 6"	220	291	112	2.6
A.R.I. NR-010 LS 6"	220	380	112	3
A.R.I. NR-010 FV 6"	324	324	414	5.5
A.R.I. NR-010 8"	256	323	132	3.7
A.R.I. NR-010 LS 8"	256	415	132	3.8
A.R.I. NR-010 FV 8"	340	365	575	8
A.R.I. NR-010 10"	308	399	145	5.2
A.R.I. NR-010 LS 10"	308	465	145	5.7
A.R.I. NR-010 FV 10"	410	425	688	11



NOTE

For determining the height of a check valve with a limit switch, add an additional space of 2 - 3 cm.

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

Parts List and Specifications | 1½" 2"

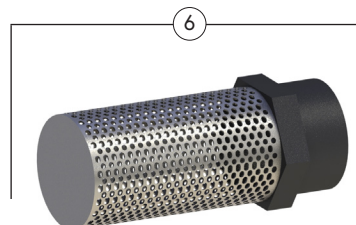
	Part	Material
1	Model A.R.I. NR-010 LS	
	Limit Switch Assembly	Reinforced Nylon + Acetal + Stainless Steel 316
	O-ring	NBR
2	Cover	Reinforced Nylon
3	Spring	SAE 302
	Spring Housing	Acetal
4	Disk Assembly	
	Disk	Reinforced Nylon
	Seal	EPDM
	Shaft	Stainless Steel 316
5	Body Assembly	
	Body	Reinforced Nylon
	O-ring	NBR
6	Model A.R.I. NR-010 FV	
	Foot Valve Assembly	Reinforced Nylon + Stainless Steel 316



Model NR-010 FV

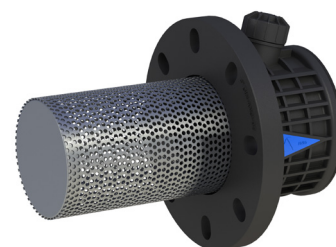


Model NR-010 LS

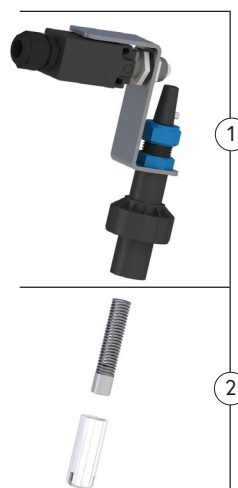


Parts List and Specifications | 3" 4"

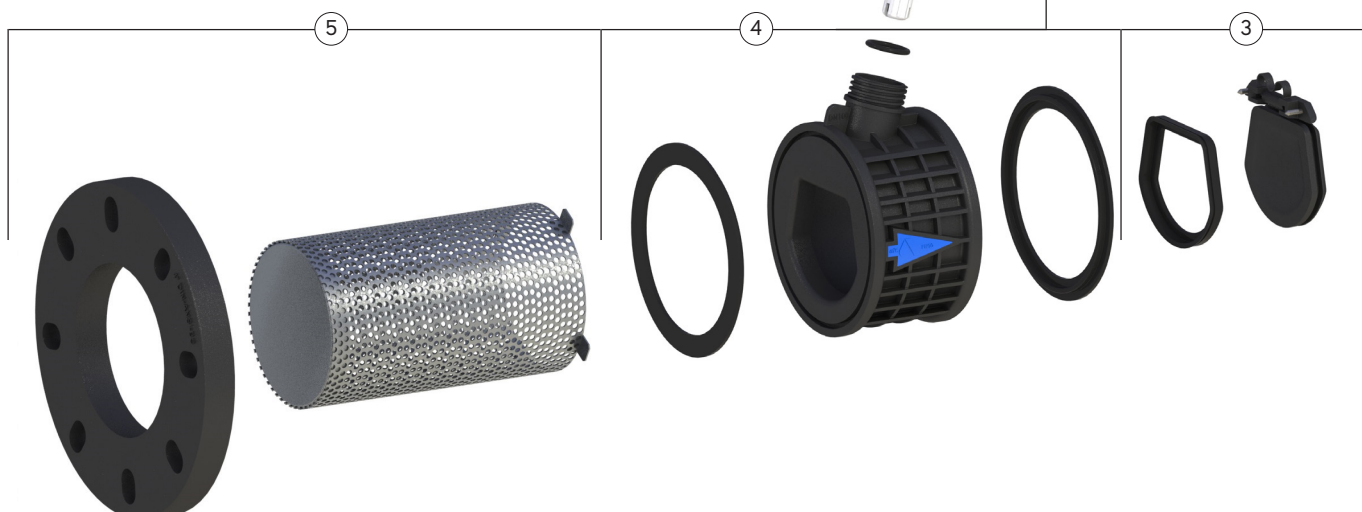
	Part	Material
1	Model A.R.I. NR-010 LS	
	Limit Switch Assembly	Reinforced Nylon + Acetal + Stainless Steel 316
2	Spring	SAE 302
	Spring Housing	Acetal
3	Flap Assembly	
	Flap	Reinforced Nylon + Stainless Steel 316
	Flap Seal	EPDM
4	Body Assembly	
	Body Seal	EPDM
	Body	Reinforced Nylon
	O-ring	NBR
	Body Seal	EPDM
5	Model A.R.I. NR-010 FV	
	Screen	Stainless Steel 316
	Flange	Reinforced Nylon



Model NR-010 FV



Model NR-010 LS



Parts List and Specifications | 6" 8"

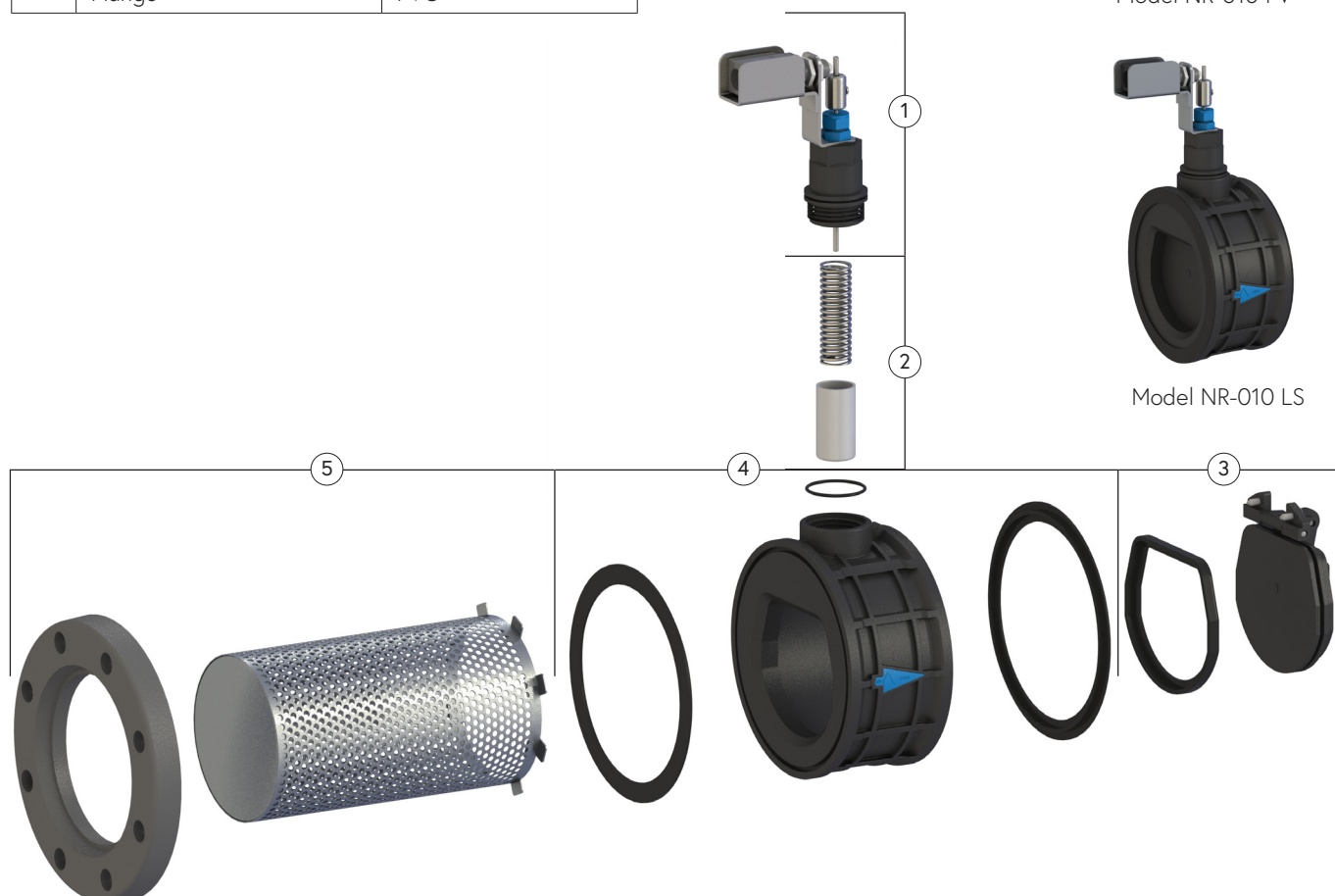
	Part	Material
1	Model A.R.I. NR-010 LS	
	Limit Switch Assembly	Reinforced Nylon + Acetal + Stainless Steel 316
2	Spring	SAE 302
	Spring Housing	Acetal
3	Flap Assembly	
	Flap	Reinforced Nylon + Stainless Steel 316
	Flap Seal	EPDM
4	Body Assembly	
	Body Seal	EPDM
	Body	Reinforced Nylon
	O-ring	NBR
	Body Seal	EPDM
5	Model A.R.I. NR-010 FV	
	Screen	Stainless Steel 316
	Flange	PVC



Model NR-010 FV



Model NR-010 LS



Wafer Style Check Valve - Foot Valve

The A.R.I. NR-010 line of Foot Valves is a non-return spring-loaded check valve with a perforated screen.

The valve is installed on the intake suction pipe below the water level, maintaining a full suction pipe.

Such an installation is essential in pumps that intake from a lower water level when the pump does not include a self-priming mechanism, which saves the need to operate vacuum pumps for pump start up.



Foot Valve Screen Dimensions

Nominal Size	3"	4"	6"	8"	8"	10"	10"
Screen Hole Dia. (mm)	3	3	3	3	6	3	6
Screen Area (mm ²)	41684	60936	118771	153311	153311	204905	204905
Screen Open Area (mm ²)	33%	33%	33%	33%	62%	35%	62%
	13756	20109	39194	50592	95053	71717	127041
Screen Length (mm)	145	195	300	440	440	540	540
Screen Diameter (mm)	90	115	170	210	210	295	295