

NR-010 PN 10 / PN 16



Wafer Style Check Valve

Description

The NR-010 Check Valve prevents the return flow of water to its source and provides quiet closure and total sealing of the sealing face. It has a quick, spring-assisted closure that minimizes the possibility of water hammer and is designed for free flow of water without interference and with minimal head loss.

The check valve is compatible for installation on pipelines with horizontal pumps or boosters. The check valve is made from composite materials to withstand highly abrasive conditions and to ensure long-term service in corrosive liquid environments such as seawater, brine and chlorine water.

Applications

- After pumps/boosters
- Filtration systems
- Swimming pools (additional modifications are required for this application)
- Fertilizer system
- Greenhouses

Main Features

- Working pressures: Up to 10 bar, 16 bar
- Minimum working pressure: 0.2 bar.
- Maximum working temperature: 60°C.
- The body of the valve is made from composite materials.

NR-010 1½", 2"

- Female threaded BSPT or NPT for easy and secure connection to the pipeline.
- Removable cover allows for easy cleaning, maintenance and seal replacement without removing the valve from the pipeline.

NR-010 3" – 10"

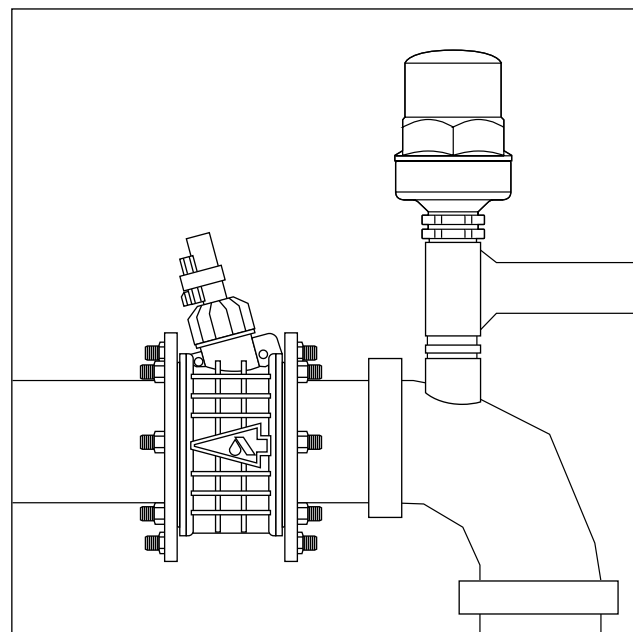
- The valve connects between flanges.
- The valve is supplied together with seals for flanges.
- The spring assembly mechanism is outside of the flow cross-section and can be replaced without removing the valve from the line.

Valve Selection

- The NR-010 is available in diameter sizes 10 bar - 1.5" - 10" 16 bar - 1.5" - 8"
- The valve is available with a reed switch that transmits a contact signal upon the start of flow or its discontinuance (pump safety mechanism), Model NR-010-LS.
- The valve (1.5", 2") is available with up to four 1/8" side ports for measuring pressure/ pressure release cocks / command lines for external controls.
- The valve is available with a strainer added as Check Valve Model NR-010-FV (foot valve). (3"-10").

Note

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 and flange standard and type of liquid.



DIMENSIONS AND WEIGHTS

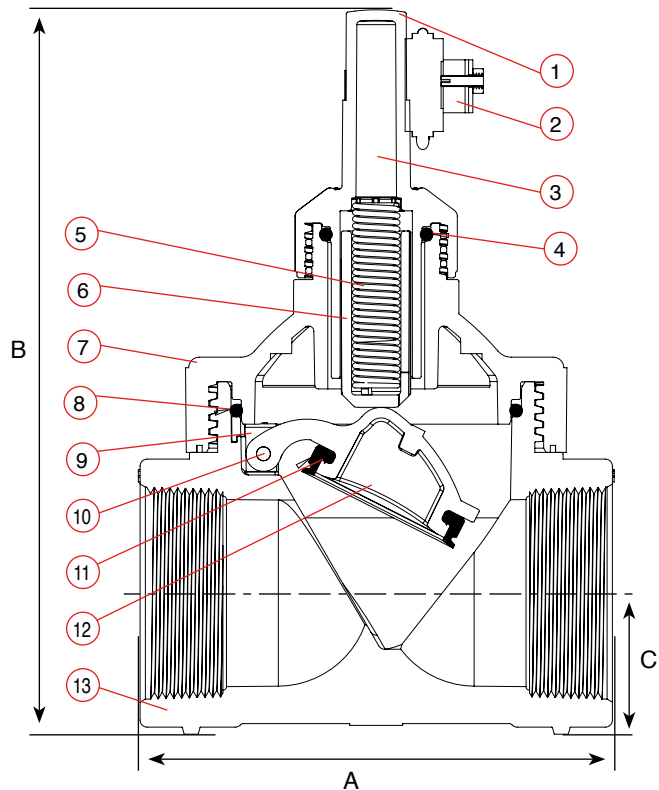
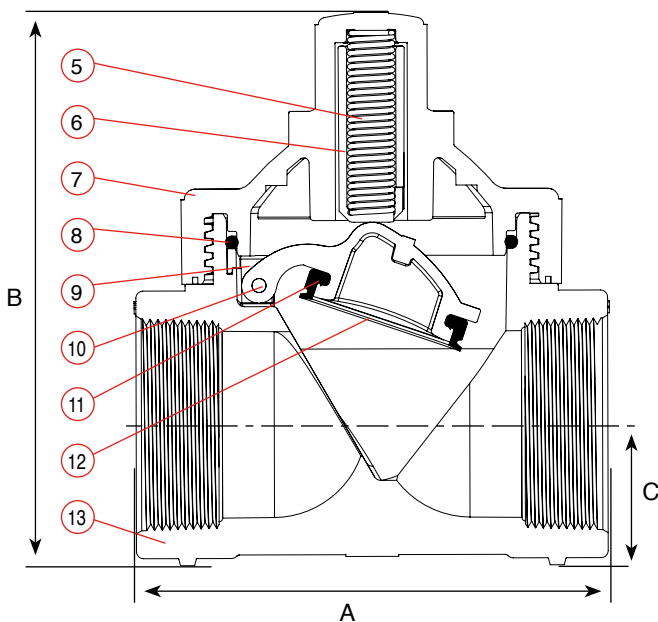
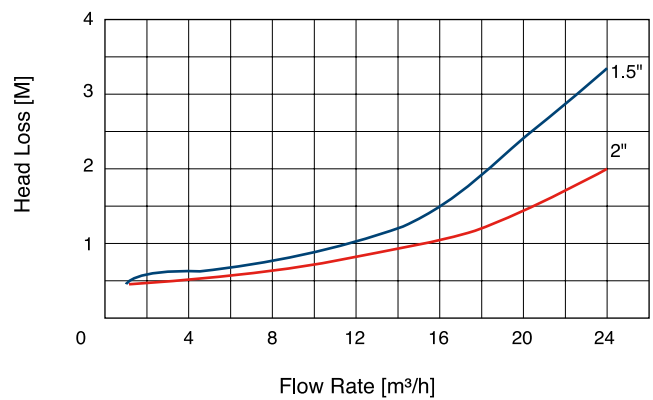
Nominal Size	Dimensions mm			Weight Gr.
	A	B	C	
NR -010 1½"	134	149	34.5	605
NR -010 LS 1½"	134	197	34.5	635
NR-010 2"	134	157	40	620
NR-010 LS 2"	134	205	40	650



PARTS LIST AND SPECIFICATION

No.	Part	Material
1.	Magnet Cover	Reinforced Nylon
2.	Reed Switch Sensor	
3.	Magnet Shaft	Acetal + Steel
4.	O-Ring	BUNA-N
5.	Spring	Stainless Steel 302
6.	Spring Housing	Acetal
7.	Cover	Reinforced Nylon
8.	O-Ring	BUNA-N
9.	Shaft Housing	Acetal
10.	Shaft	Stainless Steel 316
11.	Seal	EPDM
12.	Disc	Reinforced Nylon
13.	Body	Reinforced Nylon

HEAD LOSS



DIMENSIONS AND WEIGHTS

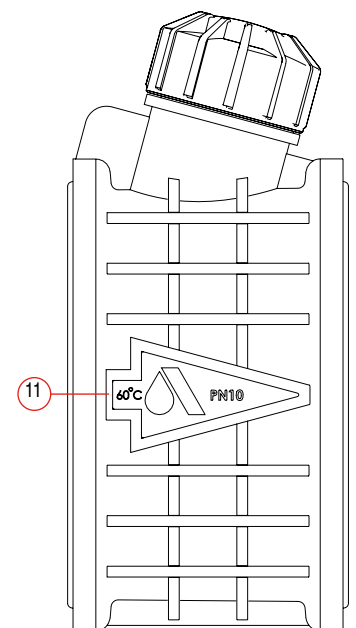
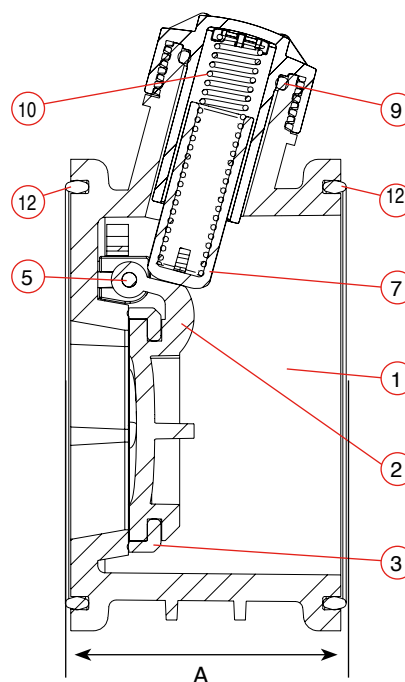
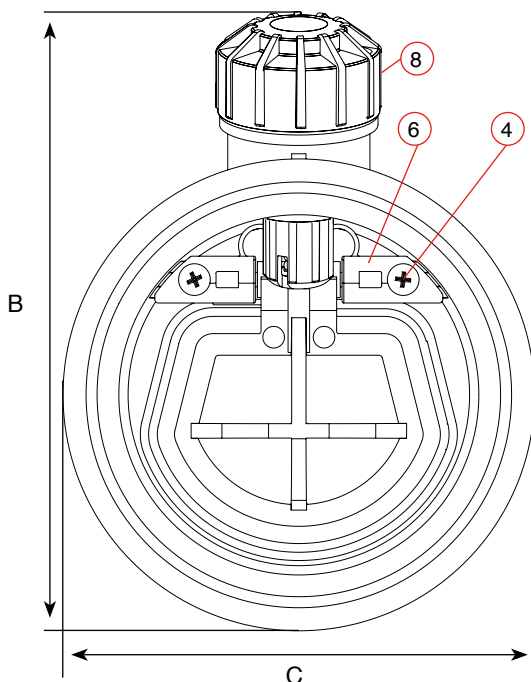
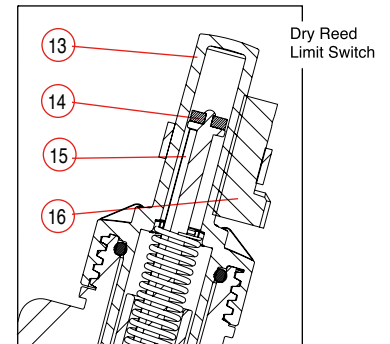
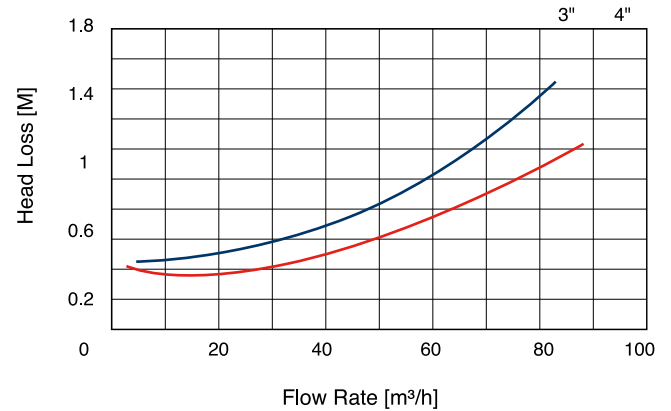
Nominal Size	Dimensions mm			Weight Gr.
	A	B	C	
NR -010 3"	75	172	132	571
NR -010 LS 3"	75	219	132	580
NR-010 4"	85	191	151	732
NR-010 LS 4"	85	238	151	740



PARTS LIST AND SPECIFICATION

No.	Part	Material
1.	Body	Reinforced Nylon
2.	Disc	Reinforced Nylon
3.	Seal	EPDM
4.	Bolt (x2)	Stainless Steel 304
5.	Shaft	Stainless Steel 316
6.	Shaft Housing	Acetal
7.	Spring Housing	Acetal
8.	Spring Cover	Reinforced Nylon
9.	O-Ring	BUNA-N
10.	Spring	Stainless Steel 302
11.	Directional Arrow	Polypropylene
12.	Flange Seals	EPDM
13.	Magnet Cover	Reinforced Nylon
14.	Magnet (x3)	
15.	Magnet Shaft	Acetal
16.	Dry Reed Limit Switch	

HEAD LOSS

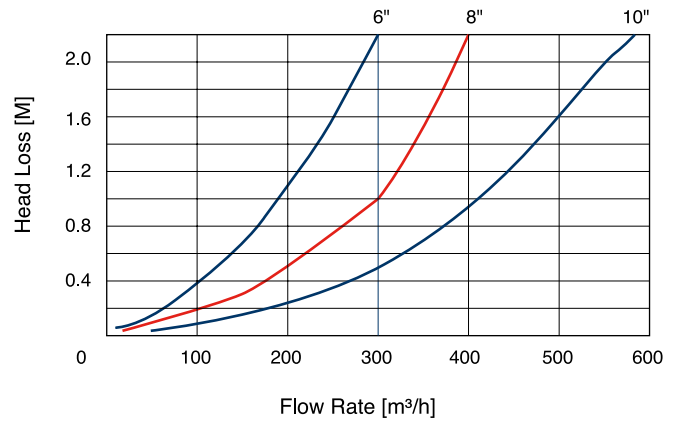


DIMENSIONS AND WEIGHTS

Nominal Size	Dimensions mm				Weight Kg.
	A	B	C	D	
6"	107	291	220	-	2.6
LS 6"	107	380	220	175	3.1
8"	132	323	259	-	3.7
LS 8"	132	413	259	170	4.3
10"	145	376	310	-	5.2
LS 10"	145	465	310	175	5.7



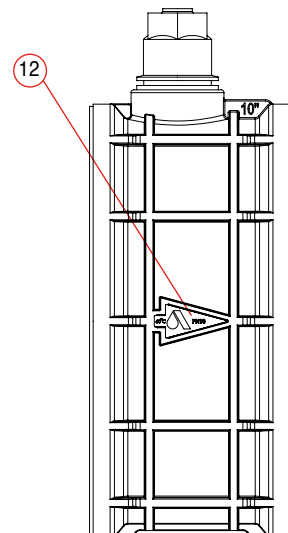
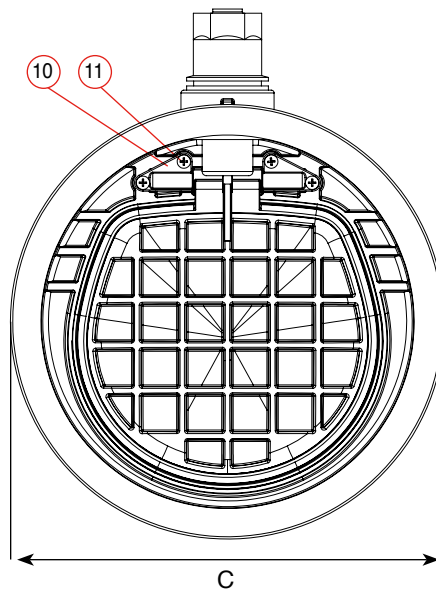
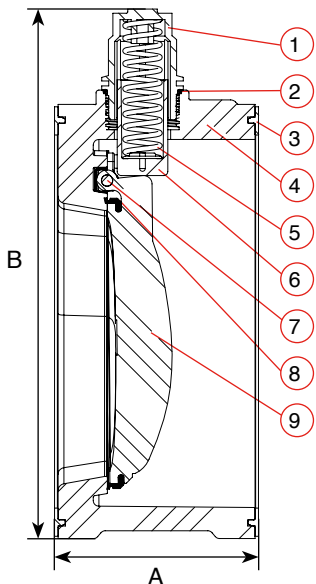
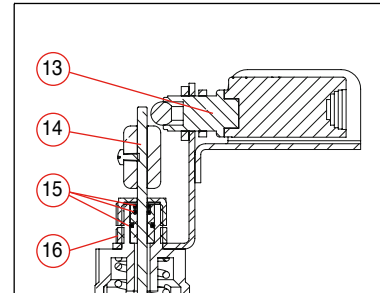
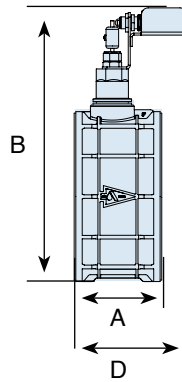
HEAD LOSS



PARTS LIST AND SPECIFICATION

No.	Part	Material
1.	Spring Cover	Reinforced Nylon
2.	O-Ring	BUNA-N
3.	Flange Seals	EPDM
4.	Body	Reinforced Nylon
5.	Spring	Stainless Steel 302
6.	Spring Housing	Acetal
7.	Shaft	Stainless Steel 316
8.	Flap Seal	EPDM
9.	Flap	Reinforced Nylon
10.	Shaft Housing	Acetal
11.	Bolt (x2)	Stainless Steel 304
12.	Directional Arrow	Polypropylene
13.	Limit Switch Assembly	
14.	Position Indicator Stem	Stainless Steel 316
15.	O-Ring	BUNA-N
16.	Nut	Reinforced Nylon

NR-010 LS (Limit Switch)

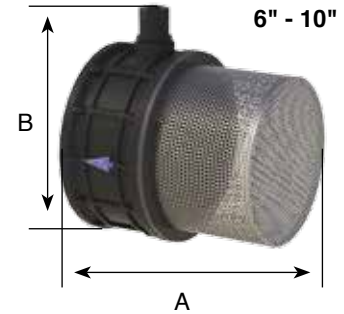
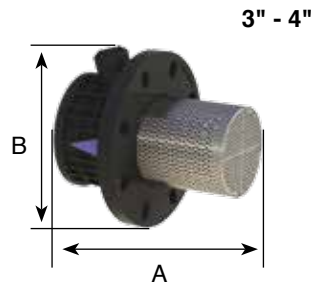


Wafer Style Check Valve - Foot Valve

The NR-010 line of Foot Valves is a one-way or anti-siphon valve with a filtration net. The valve is installed on the pick-up end of the water pipe near the bottom of the well or at the bottom of a pump station suction pipe. The NR-010 Foot Valve prevents water from flowing backwards out of the jet pump and well piping back into the well when the jet pump stops operating.

DIMENSIONS AND WEIGHTS

Nominal Size	Dimensions mm		Weight Kg.
	A	B	
3"	204	207	1.3
4"	231	233	2.0
6"	291	291	3.2
8"	311	323	4.4
10"	324	376	5.6



Foot Valve Screen Dimensions

Nominal Size	3"	4"	6"	8"	8"	10"	10"
Passage Dia. (mm)	90	115	170	210	210	265	265
Screen Hole Dia. (mm)	3	3	3	3	6	3	6
Screen Area (mm ²)	41684	60936	118771	153311	153311	204905	204905
Screen Passage Area (mm ²)	33%	33%	33%	33%	62%	35%	2%
	13756	20109	39194	50592	95053	71717	127041
Inlet Passage Area (mm ²)	3249	5315	13449	19410	19410	31934	31934
Ratio Screen Passage Area / Inlet Passage Area	4.2	3.8	2.9	2.6	4.9	2.2	4.0
Inlet Passage Area for Nominal Dia. (mm ²)	4416	7850	17663	31400	31400	49063	49063
Ratio Nominal Inlet Screen Passage / Area	3.1	2.6	2.2	1.6	3.0	1.5	2.6