

NR-040



CHECK VALVE WITH REMOVABLE COVER

Description

NR-040 "EREZ" swing type check valve allows flow in only one direction and prevents backflow. An opening is provided at its top for easy cleaning and maintenance, without having to remove the valve from the system.

Operation

The flap (disk) is connected to the valve's body by means of an arm. Sealing is achieved by closing the flap against a seat located at the valve's opening.

Surge Control

Closure may occur in two different ways:

- Normal and noiseless closure of the flap.
- Closure under backflow, in which case pressure surge occurs in the line.

To avoid pressure surges, a counterweight should be attached to the valve's extended shaft. This will cause the flap to close at the precise moment flow stops and before its direction is reversed. The returning wave will find an already closed flap and will be unable to develop acceleration. Thus, surge effects will be reduced to a minimum. Where necessary, two counterweights may be attached, one of each side of the extended shaft.

Main Features

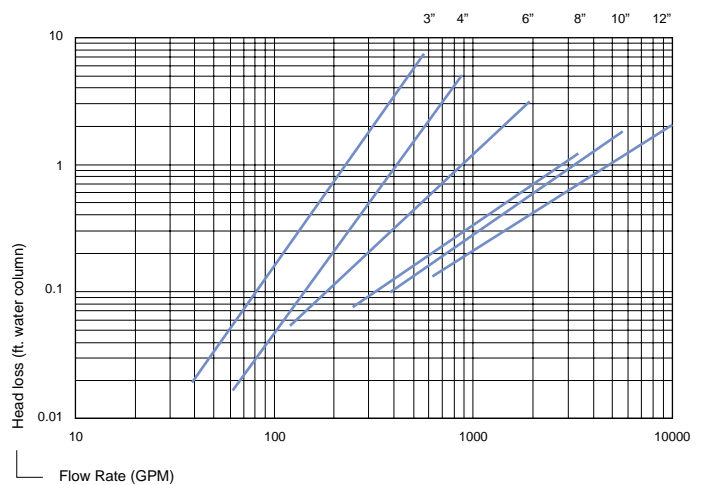
- Working pressure: 3-230 psi.
- Testing pressure: 360 psi.
- Opening at valve's top for easy cleaning, maintenance and seat replacement without need to remove the valve from the system.
- Minimum head losses and low-cost operation, due to:
 - The flap rises above the flow profile and does not disturb the flow.
 - Full flow passage, without reduction in diameter.
 - Hydrodynamic body and disc design for reduced head losses.
- A rubber stopper prevents the flap from damaging the valve body at maximum opening.
- Can be installed in either horizontal or vertical position. Vertical installation requires a counterweight.
- Supplied with extended shaft on both sides.
- A counterweight or an electric limit switch may be attached to the extended shaft. The limit switch transmits signals whenever flow starts or stops.
- Vulcanized flap prevents wear during closure under pressure.

- Internal parts made of corrosion-resistant materials.
- The flap and the arm are connected at two separate points in order to reduce wear due to impact.

Valve Selection

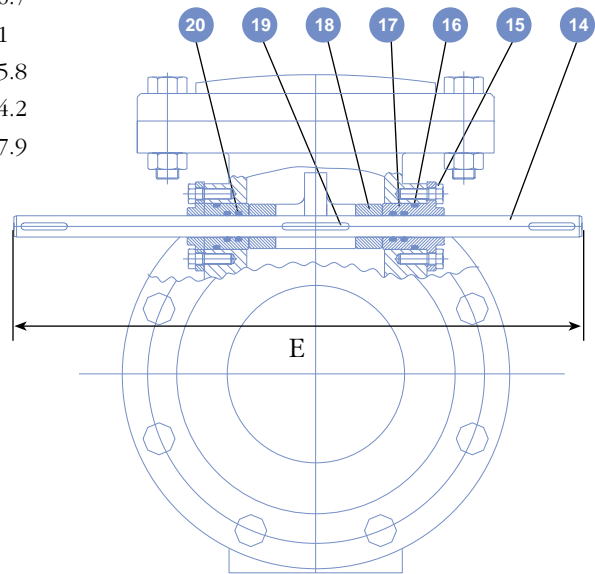
- The valve is manufactured in sizes ranging from 3" to 36.
- A counterweight or an electric limit switch may be attached to the extended shaft. The limit switch transmits signals whenever flow starts or stops.
- A.R.I Valves may be adapted to different liquids by coating with Enamel or Vulcanized coating, upon request.
- The valve may be ordered to comply with any required standard.
- Optional sealing: bronze on bronze or stainless steel on stainless steel, for operation under adverse or extremely corrosive conditions or where accelerated wear of the rubber flap is expected
- The valve may be ordered with a drainage outlet.
- The valve may be ordered with a body made of stainless steel SAE 316.

HEAD LOSS GRAPH



DIMENSIONS AND WEIGHTS

Nominal Size	Dimensions					Weight Lbs.
	A	B	C	D	E	
3"	9 1/2	7 7/8	9 27/32	12 15/32	11 13/16	44.1
4"	10 5/16	9 1/4	11 1/32	13 11/16	12 12/32	62.8
6"	13 13/16	11 15/64	14 2/64	9 29/32	15 3/4	124.6
8"	16 3/4	13 1/2	20 23/32	25 1/8	19 11/16	222.7
10"	18 7/8	15 15/16	21 7/64	26 3/8	21 21/32	366
12"	21 25/32	18 7/64	24 3/32	28 5/8	23 5/8	534.6
14"	31	21 1/16	28 3/4	33 15/16	27 9/16	776
16"	29 15/16	22 27/32	29 22/32	35 27/32	27 9/16	802.5
18"	38 1/2	25 13/64	34 15/16	47 21/32	36 5/8	1,666.7
20"	34 1/16	29 17/32	35 7/8	43 23/32	39 3/8	1,411
24"	51 3/16	33 5/64	44 11/64	51 31/32	44 3/32	2,755.8
28"	59 1/16	35 27/32	50 13/32	60 27/32	48 1/2	3,364.2
30"	68 29/32	38 3/16	53 15/16	75	51 25/32	4,157.9



PARTS LIST AND SPECIFICATION (3"-16")

No. Part	Material
1. Counterweight	Steel DIN St.37
2. Lifting Ring	Bronze ASTM B-62
3. Cover WP 230	Cast Iron ASTM A48 CL.358
WP 360	Ductile Iron ASTM A-536
4. Bolt and Nut	G. Steel Chromate Plated
5. Cover O-Ring	BUNA-N
6. Body WP 230	Cast Iron ASTM A-48 CL.358
WP 360	Ductile Iron ASTM A-536
7. Cotter Pin	Stainless Steel SAE 304
8. Arm Pin	Stainless Steel SAE 304
9. Arm	Bronze ASTM B-62
10. Disc	Bronze ASTM B-62
Disc Vulcanized Coating	Natural+Synthetic Rubber
11. Bolt	Stainless Steel SAE 303
12. Sealing Ring	Bronze ASTM B-62
13. Sealing Ring O-Ring	BUNA-N
14. Shaft	Stainless Steel SAE 303
15. Plug Bolt	Stainless Steel SAE 303
16. Plug O-Ring	BUNA-N
17. Plug	Brass ASTM B-124
18. Spacer	Brass ASTM B-124
19. Disc Arm Key	Stainless Steel SAE 304
20. Shaft O-Ring	BUNA-N

