

# NR-040 NR-042/044/046 CHECK VALVE WITH REMOVABLE COVER

## Lowest available head loss and low-cost operation, due to:

The flap rises above the flow profile.

Full flow passage, without reduction in diameter.

Hydrodynamic body and disc design.

## Extended, long-life durability due to:

Corrosion resistant inner parts ensure long term service under adverse conditions.

Damage-free vulcanized flap. Sealing pressure during closure is exerted only on metal parts, eliminating wear and tear on vulcanized flap.

Surge-resistant body: NR-040 PN-16 cast iron; NR-042 PN-25 Sphero Nodular; NR-044, D-046... PN-40-100 Cast steel body.

Opening at the top of the valve allows for easy cleaning, maintenance, and seat replacement and eliminates the need to remove the valve from the system.

The valve is manufactured in sizes ranging from 3" to 36".

Stainless Steel extended Shaft on both sides.

Optional sealing: bronze on bronze or stainless steel on stainless steel for extremely adverse working conditions.

Can be installed in either horizontal or vertical position.

Can be adapted to various types of liquid upon request.

Standard metal body - baked polyester coating. Available with rilsan and enamel coating, or with a stainless steel body.

## Optional Additions:

- Counterweight to avoid pressure surges.
- Electric limit switch indicator, to transmit signals whenever flow starts or stops.
- Provision for future installation of hydraulic stopper.
- A drainage outlet.

Hydraulic Controlled Check Valve NR-040-HC is available.

Flanges are available in BS/ISO/ANSI standards.

## Ordering

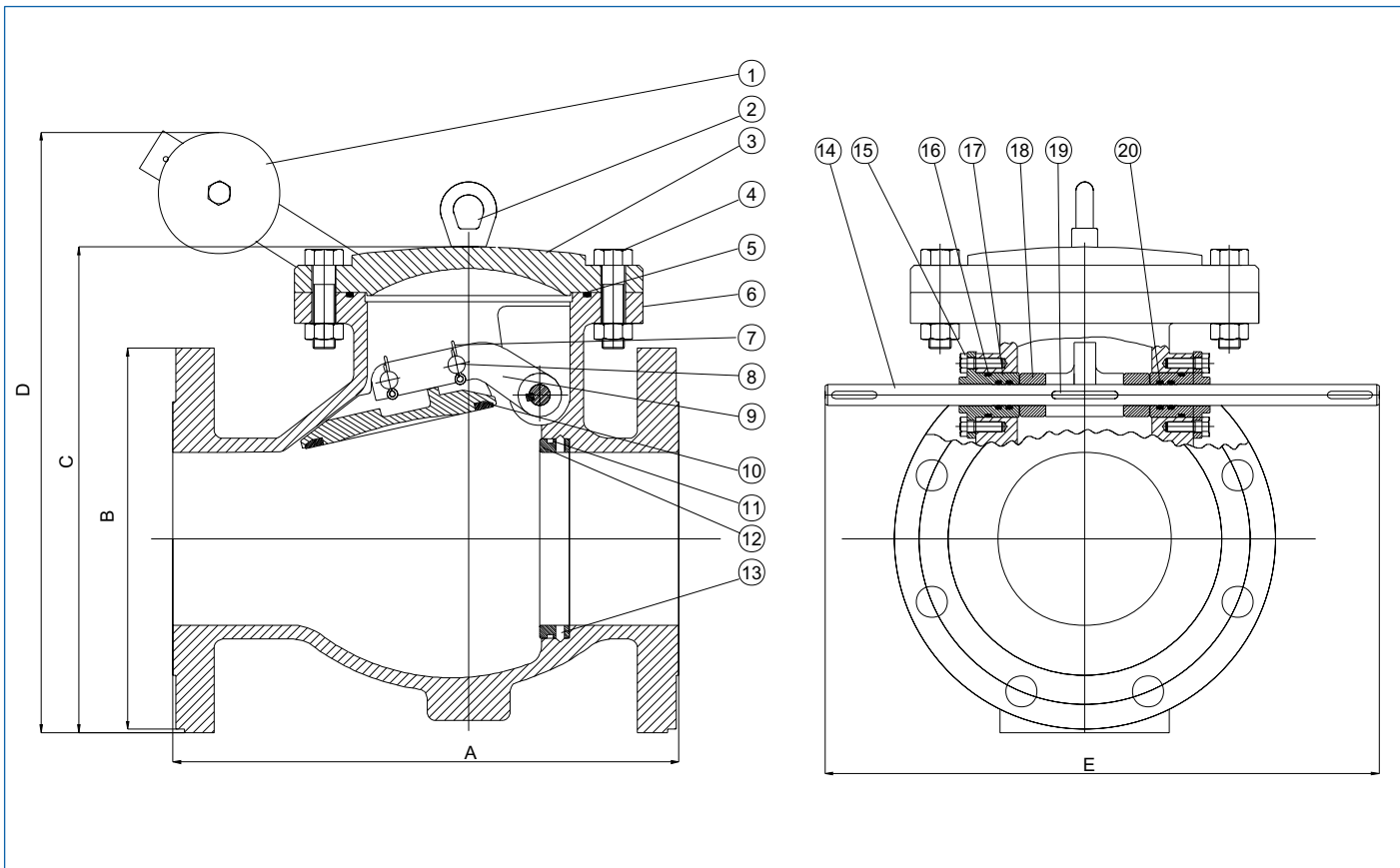
Upon ordering, please specify: model, size, working pressure, flanges standard and type of liquid.



**A.R.I. Flow Control Accessories**

Kfar Charuv, 12932 Israel Tel. 972-6-6761988 Fax. 972-6-6763402

<http://arivalves.com>



## DIMENSIONS AND WEIGHTS

Nominal Size	PN-16						PN-40-100				
	A*	B	C	D	E	Weight	A*	B	C	D	E
3"	241	200	250	316	300	20.0	220	210	276	365	250
4"	262	235	280	347	320	28.5	235	293	365	350	
6"	350	285	359	505	400	56.5	380	355	431	600	400
8"	425	343	526	638	500	101.0	475	415	560	650	600
10"	479	405	536	670	550	166.0	498	470	642	782	600
12"	553	460	612	727	600	242.5	585	530	765	805	650
14"	787	535	730	862	700	352.0	900	600	730	862	700
16"	760	580	755	910	700	364.0	782	620	800	910	700
18"	978	640	887	1210	930						
20"	865	750	911	1110	1000	640.0					
24"	1300	840	1122	1320	1120	1250.0					
28"	1500	910	1280	1545	1130	1526.0					
30"	1750	970	1370	1905	1310	1886.0					

\* For international standards, please look for conversion table, next page.

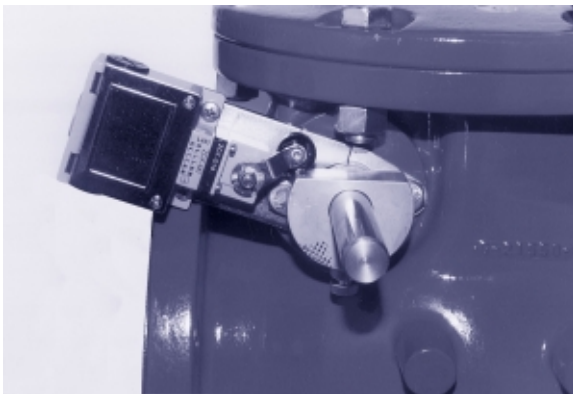


## PARTS LIST AND SPECIFICATION

No. Part	3"-16" PN-16-25	3"-16" PN-40-100	18"-30" PN-16
1. Counterweight	Steel DIN St.37	Steel DIN ST.37	Steel DIN ST.37
2. Lifting Ring	Bronze ASTM B-62	Bronze ASTM-B-62	
3. Cover PN-16 PN-25	Cast Iron ASTM A48 CL.358 Cast Iron ASTM A-536	Steel DIN ST.37	Steel DIN ST.37
4. Bolt and Nut	G. Steel Chromate Plated	G. Steel Chromate Plated	G. Steel Chromate Plated
5. Cover O-Ring	BUNA-N	BUNA-N	BUNA-N
6. Body PN-16 PN-25	Cast Iron ASTM A-48 CL.358 Cast Iron ASTM A-536	Cast Steel ASTM A-216	Steel DIN ST.37 20" Cast Iron ASTM-A-536 24" Ductile Iron
7. Cotter Pin	Stainless Steel SAE 304	Stainless Steel SAE 304	Stainless Steel SAE 304
8. Arm Pin	Stainless Steel SAE 304		Stainless Steel SAE 303
9. Arm	Bronze ASTM B-62	Stainless Steel SAE 304	Stainless Steel SAE 304
10. Disc Disc Vulcanized Coating*	Bronze ASTM B-62 Natural+Synthetic Rubber	Stainless Steel SAE 304	Steel DIN ST.37+S. Steel
11. Bolt	Stainless Steel SAE 303	Stainless Steel SAE 303	Stainless Steel SAE 303
12. Sealing Ring	Bronze ASTM B-62	Stainless Steel SAE 303	Stainless Steel SAE 303
13. Sealing Ring O-Ring	BUNA-N		
14. Shaft	Stainless Steel SAE 303	Stainless Steel SAE 303	Stainless Steel SAE 303
15. Plug Bolt	Stainless Steel SAE 303		Stainless Steel SAE 303
16. Plug O-Ring	BUNA-N	BUNA-N	BUNA-N
17. Plug	Brass ASTM B-124	Brass ASTM-B-124	Brass ASTM-B-124
18. Spacer	Brass ASTM B-124		Brass ASTM-B-124
19. Disc Arm Key	Stainless Steel SAE 304	Stainless Steel SAE 316	Stainless Steel SAE 316
20. Shaft O-Ring	BUNA-N		BUNA-N

### Options:

- Sealing: bronze on bronze or st.st. on st.st.
- Two separate connecting points of the arm.
- Arm & disc (3"-16" PN 16-25) made of Ductile Iron.



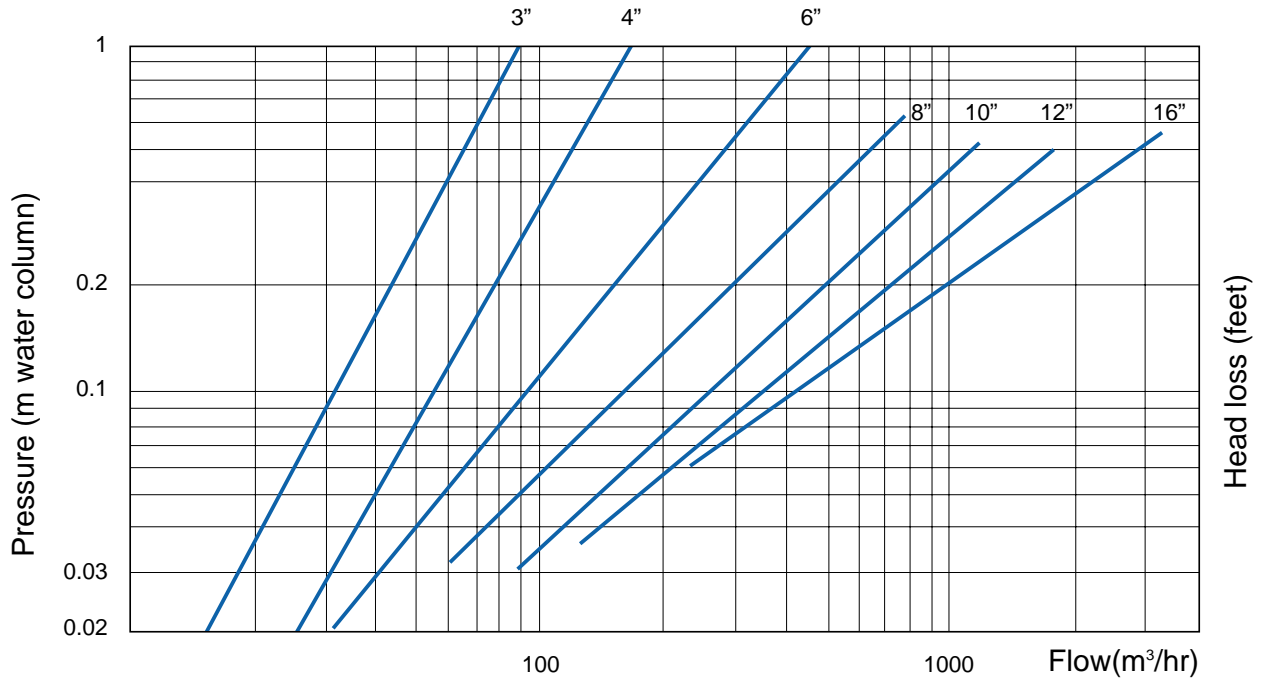
### OPTION: CHECK VALVE WITH ELECTRIC INDICATOR

A device which permanently monitors the status of the non-return valve, signals the pump and promises a smooth and trouble-free operation of the system. The device is made up of a stationary part, fastened to the body of the non-return valve and a single moving part, fastened to the shaft of the valve, which moves with the opening/closing of the non-return valve.

The electric indicator for the non-return valve can be obtained in diameters 3"-16".



## HEAD LOSS CHART



### FACE TO FACE AVAILABLE DIMENSIONS FOR A.R.I CHECK VALVES MODEL NR-040

Nom. Size	Nom. Size	ISO 5752 STANDARD		DIN 3202	A.R.I STANDARD		ANSI B16.10			
		PN 10-16	PN 25-40	F6	PN-16	PN-25	CLASS 125-150		CLASS 250-300	
mm	inch	mm	mm	mm	mm	mm	mm	inch	mm	inch
80	3	241	318	260	241	241	241.3	9-1/2	317.7	12-1/2
100	4	292	356	300	262	262	292.1	11-1/2	355.6	14
150	6	356	444	400	350	350	355.6	14	445.5	17-1/2
200	8	495	533	500	425	420	495.3	19-1/2	533.4	21
250	10	622	622	600	479	479	622.3	24-1/2	622.3	24-1/2
300	12	698	711	700	553	553	698.5	27-1/2	711.2	28
350	14	787	838	800	787	900	787.4	31	838.2	33
400	16	914	864	900	760	782	863.6	34	863.6	34
450	18	978	978	1000	978	978	977.9	38-1/2	977.9	38-1/2
500	20	978	1016	1100	865	865	977.9	38-1/2	1016	40
600	24	1295	1346	1300	1300	1312	1995.4	51		
700	28	1448	1449		1500	1500				
750	30	1524	1594		1750	1750				
800	32	1850	1850		1850	1850				
900	36	1956	2083		2050	2050				
1000	40	2250	2250		2250	2250				

### GENERAL COMMENT

- Length tolerances in DIN  $\pm 0.5\%$  not less than  $\pm 1\text{mm}$ .
- length tolerances in ISO, ANSI AND A.R.I

Tolerance	up to and including	over
$\pm 2$	250	0
$\pm 3$	500	250
$\pm 4$	800	500
$\pm 5$	1000	800
$\pm 6$	1600	1000
$\pm 8$	2250	1600

