CHECK VALVE

Lift Type

Model 70N

Non-slam, lift type, non-return Check Valve that opens to allow flow in the required direction, and closes fast and drip tight to prevent any back flow.

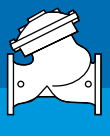
BERMAD 700 series valves are hydraulic, oblique pattern, globe valves with double chamber unitized actuator, that can be disassembled from the body as a separate integral unit. The valves hydrodynamic body is designed for unobstructed flow path and provides excellent and highly effective modulation capacity for high differential pressure applications.

Lift Pump Station with BERMAD 70N Check Valve preventing reverse flow into the reservoir. The station also features a 730 Pressure Relief Valve that maintains minimal flow if churn operation occurs. also featured is the 735-55 Solenoid Operated Surge Anticipating Valve to reduce water hammer in an abrupt pump stop.

Typical Application

- Downstream of each high pressure pump where reverse flow prevention is required
- In installations where flow indicators are required at the check valves, e.g. pumps no-flow protection or branch flow indicators
- In water systems requiring one-way zone isolation
- In non regular installation sites with vertical or horizontal lines providing upward or downward flows
- In pumping stations operating fix or variable speed pumps

BERMAD Buildings & Construction



700 Series

Potable Water • Flow Control

Model 70N

Features and Benefits

- High Quality Construction Materials - Reliable, resilient and long lasting operation
- Robust Design - Suitable for constant, intense operation
- In-Line Serviceable - Quick and easy maintenance and service
- Full bore valve port area and hydrodynamic body provide unobstructed flow path, with minimal pressure loss, operation noise and low cavitation damage
- Check and seat assemblies can be easily disassembled from the valve body as integral units for minimal downtime
- Optional additional accessories available, including limit switches, position indicators, V / U ports, and more
- Convertible platform for vast number of applications
- Optional flow indication switch or opening position sensor for transmitting real time valve status to electrical control systems
- Spring loaded mechanism for fast closing – eliminates reverse flow, slam and water hammer, suitable for both vertical and horizontal installation

Technical Data

General:

End connections:
Grooved / Flanged / Threaded
Pressure Rating: 400 psi; PN25
Valve Pattern: Y (Oblique) / Angle
Working Temperature:
Cold Water up to 140ºF; 60ºC
Optional Higher Temperatures:
Available on request

Main Valve Materials:

Body, Cover and Partition:
Standard: Ductile Iron
Optional: Stainless Steel 316
Seat: Stainless Steel
Internals:
Stainless Steel, Tin Bronze & Coated Steel
Seals: Synthetic rubber
Coating: Blue Fusion bonded epoxy

Note: For 600 psi / 40 bar application see the model 80N

* For other optional material consult BERMAD.
** Materials may vary according to sanitary standard.

How To Order

Additional Configurations & Options >

Please Specify the requested valve in the following sequence:

BC - 2" - 70N - 00 - P2 - Y - C - VI - EB - 000 - 00 - 0

Segment

BC

Model

70N

Size

1½"	DN40
2"	**DN50**
2½"	DN65
3"	DN80
4"	DN100
6"	DN150
8"	DN200
10"	DN250
12"	DN300
14"	DN350
16"	DN400
18"	DN450
20"	DN500
24"	DN600

Series

	Code
Classic	**00**
Sigma EN	EN

Potable water Compatibility

	Code
Approved	**P2**
Unregistered	P0

Orientation

	Code
Y Oblique	**Y**
Angle	A

Construction Material

	Code
Ductile Iron	**C**
Stainless Steel 316	N

End Connection

Standard	Code
Up to 250 psi / PN16	
Grooved	**ANSI C606** **VI**
	BS 1387 VB
Flanged (Other standards available)	ISO-16 16
	ABNT16 B6
	ANSI 150 A5
	AST-* S*
Threaded	BSPT BP
	NPT NP
250-400 psi / PN25	
Grooved	ANSI C606 V2
	BS 1387 VD
Flanged (Other standards available)	ISO-25 25
	ABNT25 B2
	ANSI 300 A3
Threaded	BSPT PH
	NPT NH

Coating

	Code
Epoxy Blue	**EB**
Epoxy Blue with UV Protection	EV
Uncoated	UC

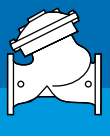
Additional Attributes (Multiple Options Permitted)

	Code
Valve Position Indicato	I
Limit Switch	S
Flow Stem	M

NSF 61/372 USA
Bulgarkontrola Bulgaria
ACS France
GOST Russia
PZH Poland

All images in this catalog are for illustration only

BERMAD Buildings & Construction



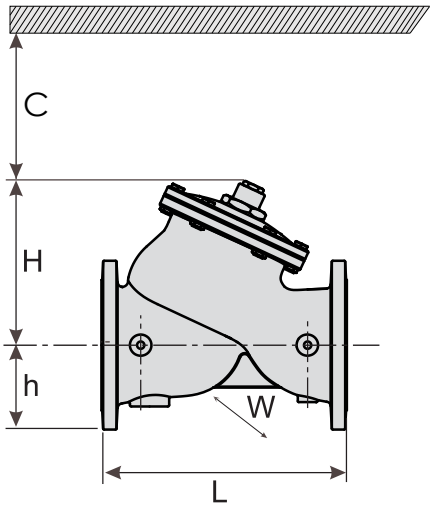
700 Series

Potable Water • Flow Control

Model 70N

Dimensions and Weights

Flanged 70N-EN										
Nominal Diameter	inch	1.5"	2"	2.5"	3"	4"	6"	8"	10"	12"
	mm	40	50	65	80	100	150	200	250	300
L	mm	230	230	290	310	350	480	600	730	850
	inch	9.06	9.06	11.42	12.20	13.78	18.90	23.62	28.74	33.46
W	mm	155	165	190	210	255	320	400	480	570
	inch	6.10	6.50	7.48	8.27	10.04	12.60	15.75	18.90	22.44
h	mm	81	86	96	108	130	163	193	227	272
	inch	3.19	3.39	3.78	4.25	5.12	6.42	7.60	8.94	10.71
H	mm	153	160	198	225	266	351	425	498	609
	inch	6.02	6.30	7.80	8.86	10.47	13.82	16.73	19.61	23.98
C	mm	76	76	76	105	127	151	185	250	300
	inch	2.99	2.99	2.99	4.13	5.00	5.94	7.28	9.84	11.81
Weight*	kg	11	13	17	25	42	80	132	211	338
	lbs	24	29	37	55	93	176	291	465	745
Kv	m³hr/bar	57	62	98	130	200	540	905	1480	2140
Cv	gpm/psi	66	72	113	150	231	624	1045	1709	2472



		Grooved 70N-00						
Nominal Diameter	inch	1.5"	2"	2.5"	3"	4"	6"	8"
	mm	40	50	65	80	100	150	200
L	mm	205	210	215	250	320	415	500
	inch	8.07	8.27	8.46	9.84	12.60	16.34	19.69
W	mm	122	122	122	168	200	320	390
	inch	4.80	4.80	4.80	6.61	7.87	12.60	15.35
h	mm	33	40	40	60	74	95	125
	inch	1.30	1.57	1.57	2.36	2.91	3.74	4.92
H	mm	161	161	161	205	251	370	404
	inch	6.34	6.34	6.34	8.07	9.88	14.57	15.91
C	mm	76	76	76	105	127	151	185
	inch	2.99	2.99	2.99	4.13	5.00	5.94	7.28
Weight*	kg	5	5	6	14	24	42	76
	lbs	11	11	13	31	53	93	168
KV	m³hr/bar	42	50	55	115	200	460	815
Cv	gpm/psi	49	58	64	133	231	531	941

Threaded 70N-00			
1.5"	2"	2.5"	3"
40	50	65	80
155	155	212	250
6.10	6.10	8.35	9.84
129	129	129	163
5.08	5.08	5.08	6.42
37	40	48	56
1.46	1.57	1.89	2.20
164	164	161	208
6.46	6.42	6.34	8.19
76	76	76	105
2.99	2.99	2.99	4.13
4	4	7	14
9	9	15	31
42	50	55	115
49	58	64	133

* Maximum Dimensions