



## CHECK VALVE

### Lift Type, High Pressure

#### Model BC-80N-P

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 800 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 valve's 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 BC-80N-P Check Valve preventing reverse flow into the reservoir. The station also features a BC-830-P Pressure Relief Valve that maintains minimal flow if churn operation

occurs. also featured is the BC-835-55-P 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

### Features and Benefits

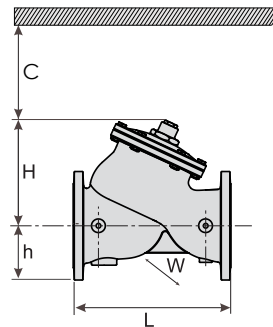
- High Quality Construction Materials - Reliable, resilient and long lasting operation
  - Robust Design - Suitable for constant, intense operation
  - In-Line Serviceable - Quick and easy maintenance and service
  - Full bore valve port area and hydrodynamic body provide unobstructed flow path, with 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
- Note:** the BC-80N-P is rated for 600 psi / 40 bar, for lower pressure grades consider the BC-70N-P



## Dimensions and Weights

Series		800 Sigma EN							800 Classic										
		Flanged							Grooved							Threaded			
Size	Inch	1½	2	2½	3	4	6	8	1½	2	2½	3	4	6	8	1½	2	2½	3
	DN	40	50	65	80	100	150	200	40	50	65	80	100	150	200	40	50	65	80
L	Inch	9.06	9.06	11.42	12.20	13.78	18.90	23.62	8.07	8.27	8.46	9.84	12.60	16.34	19.69	6.10	6.10	8.35	9.84
	mm	230	230	290	310	350	480	600	205	210	215	250	320	415	500	155	155	212	250
W <sup>a</sup>	Inch	6.10	6.50	7.01	7.87	9.25	11.81	14.17	4.84	4.84	4.84	6.69	7.76	10.31	13.94	4.84	4.84	4.84	6.69
	mm	155	165	178	200	235	300	360	123	123	123	170	197	262	354	123	123	123	170
h <sup>a</sup>	Inch	3.19	3.43	3.62	4.17	4.84	6.18	7.40	1.30	1.57	1.56	2.36	2.91	3.74	4.57	1.46	1.57	1.89	2.20
	mm	81	87	92	106	123	157	188	33	40	39.5	60	74	95	116	37	40	48	56
H <sup>a</sup>	Inch	5.00	5.00	5.00	7.05	8.70	10.83	12.60	5.00	5.00	5.00	7.05	8.70	10.83	12.60	5.00	5.00	5.00	7.05
	mm	127	127	127	179	221	275	320	127	127	127	179	221	275	320	127	127	127	179
C	Inch	3.00	3.00	3.00	4.13	5.00	5.94	7.28	3.00	3.00	3.00	4.13	5.00	5.94	7.28	3.00	3.00	3.00	4.13
	mm	76	76	76	105	127	151	185	76	76	76	105	127	151	185	76	76	76	105
Weight	lb	24	29	42	56	93	177	293	11	11	12	31	53	93	169	10	10	15	31
	kg	11	13	19	25	42	80	133	5	5	6	14	24	42	77	5	5	7	14
Cv		66	72	113	150	231	624	1045	49	58	64	133	231	531	941	49	58	64	133
Kv		57	62	98	130	200	540	905	42	50	55	115	200	460	815	42	50	55	115

3. Maximal Sizes



## Technical Data

### General:

**End connections:**  
Grooved / Flanged / Threaded  
**Pressure Rating:** 600 psi; PN40  
**Valve Pattern:** Y (Oblique) / Angle  
**Working Temperature:**  
Cold Water up to 140°F; 60°C  
**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 / Brass  
Coated Steel & POM  
**Seals:** Synthetic rubber  
**Coating:** Blue Fusion bonded epoxy

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

## How to Order

Please Specify the requested valve in the following sequence:

BERMAD Segment	Size <sup>1</sup>	Model	Series	Approval Group	End Connections & Pressure Rating	Ordering code would be
BC	4"	80N	EN	P1	A3	
Buildings & Constructions	Inch mm		Series	Potable Water <sup>2</sup>	Up to 600 psi / PN40	
	1½" 40		Classic <b>00</b>	European Standards <b>P1</b>	Grooved ANSI C606 <b>V2</b>	1. Larger sizes available on request 2. BERMAD complies with a wide range of international potable water standards. Please consult with BERMAD about compliance.
	2" 50		Sigma EN <b>EN</b>	NSF 61/372 <b>P2</b>	BS 1378 <b>VD</b>	
	2½" 65		Sigma ES <b>ES</b>	Australia Standards <b>P3</b>	Flanged ISO-40 <b>40</b>	
	3" 80			Unregistered <b>P0</b>	ANSI300 <b>A3</b>	
	4" 100				BSP <b>PH</b>	
	6" 150				NPT <b>NH</b>	



NSF 61/372 USA



Bulgarkontrola Bulgaria



GOST Russia



PZH Poland