

## BLV Series

BALL VALVES



Ball valves offer great economy and durability for a wide range of applications that do not require completely hygienic, cleanable-in-place (CIP) service. They are easy to install and maintain.

The full ported, straight-through design of ball valves frees the flow path from obstructions. As a result, pressure drops across the valves are reduced, and there is no change in elevation for piping through the valve. This allows efficient and safe production or cleaning processes in the food, beverage, industrial, and chemical industries.

SPX FLOW, Inc. (NYSE:FLOW) is a leading manufacturer of innovative flow technologies, many of which help define the industry standard in the market segments they serve. From its headquarters in Charlotte, North Carolina, it operates a sales and support network, centers of manufacturing excellence, and advanced engineering facilities, throughout the world. Its cutting-edge flow components and process equipment portfolio includes a wide range of pumps, valves, heat exchangers, mixers, homogenizers, separators, filters, UHT, and drying technology that meet many application needs. Its expert engineering capability also makes it a premium supplier of customized solutions and complete, turn-key packages to meet the most exacting of installation demands.

Incorporating many leading brands, SPX FLOW has a long history of serving the food and beverage, power and energy, and industrial market sectors. Its designs and engineered solutions help customers drive efficiency and productivity, increase quality and reliability, and meet the latest regulatory demands. In-depth understanding of applications and processes, state-of-the-art Innovation Centers, and advanced pilot/testing technology further assist in optimizing processes and reducing timescales to reliably meet production targets.

To learn more about SPX FLOW capabilities, its latest technology innovations and complete service offerings, please visit [www.spxflow.com](http://www.spxflow.com).

## BLV Series Ball Valves

### PRODUCT FEATURES AND BENEFITS

- All stainless steel construction: forged body and ball
- FDA approved materials including reinforced PTFE seats
- Cavity filled to minimize residue build-up around ball and seat
- Full port opening for unrestricted flow in the open position
- High temperature and pressure ratings for demanding service applications
- Maintenance-free pneumatic actuator with "Normally Closed", "Normally Open" or "Double Acting" orientations
- Standard ISO pattern mounting pad for easy retrofit from manual handle to pneumatic actuator
- Three piece design with floating seals
- Lockable manual handle option for added security
- Available with the identical control unit options offered on other valve types to give common look, controls interface, and spare parts across a multi-valve system

### PRODUCT SPECIFICATIONS:

#### Materials:

##### Ball:

- 1.4404 (DIN EN 10088) / AISI 316L

##### Body:

- 1.4408/1.4404 (DIN EN 10088) / AISI 316

##### Seat:

- PTFE Cavity Filled

##### Internal Surface Finish:

- $\leq 0.8\mu$  ( $\leq 32$  Ra)

##### Sizes:

- DN 15 - 100
- Inch 0.50" - 4.00"

### PERFORMANCE RATINGS:

#### Maximum Line Pressure:

- 10 bar (145 psi)

#### Temperature Ratings:

- 0 - 140°C (0-284°F)
- Short-term steam: 160°C (320°F)

## Typical product applications



#### Food and Drinks

Soups & Sauces  
Flavorings & Ingredients  
Brewery, Wort, Wine  
Pet Food  
Fats & Oils, Animal Oils  
Cereals



#### Personal Care

Extracts  
Face Creams & Lotions  
Perfumes  
Soaps  
Hair Styling Gels &  
Liquids  
Dyes & Alcohols



#### Chemical

Paints  
Adhesives  
Coatings  
Oils & Lubricants  
Detergents  
Emulsions  
Fuels



#### Utilities

Steam  
CIP Flush  
High Purity Water  
Water for Injection (WFI)

## CONTROL UNITS

### CU4 & CU4plus Series



## ADDITIONAL OPTIONS

### Proximity Switch Only

- Available with manual handle and pneumatic actuators
- 24VDC or 120VAC prox sensors with LED
- Feedback for valve open/valve closed position detection

## FEATURES AND BENEFITS

- Automated control and position monitoring for reliable processing
- Helps reduce external solenoid valve cabinets
- Reliable and long service life - robust clamp connection, water tight seals and reinforced stainless steel air coupling threads to avoid air leakages
- Clarity - clear and bright indication of valve position - 5 diodes in LED panel and convenient location
- Standardisation - same control unit used on various SPX FLOW valve lines, offers common look and control interface
- IP67 (NEMA 6) wash-down rating

## CONNECTOR OPTIONS

- S/O Cord Grip for hard wire (standard)

## INTERFACE OPTIONS

- 24 V DC Direct Connect
- AS-i Field Bus Card

## POSITION INDICATION OPTIONS

- 2 internal feedback sensors for valve open/valve closed position detection

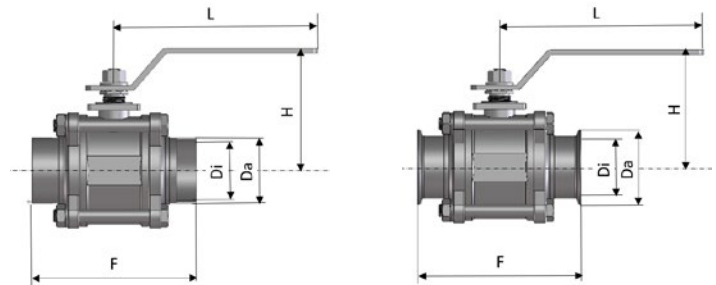
## SOLENOID VALVES

- 24 V DC
- 120 V AC

## PRODUCT DIMENSIONS:

### BLV1 - H - DN15-100; 0.50" - 4.00"

#### Ball valve, manually operated, without feedback

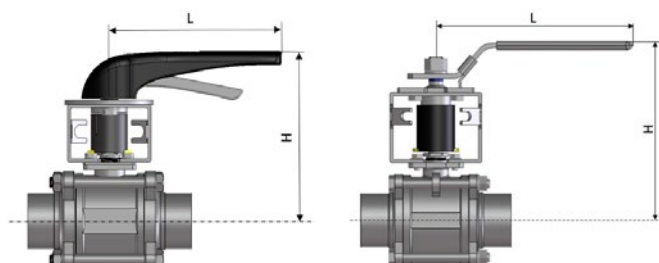


VALVE SIZE DN	DIMENSIONS MM (IN)						WEIGHT KG (LBS)
	Di	Da (WELD)	Da (CLAMP)	F	L	H	
15	16 (0.63)	19 (0.75)	34 (1.35)	88 (3.46)	132 (5.20)	64 (2.52)	0,75 (1.5)
20	20 (0.79)	23 (0.91)	34 (1.35)	101 (3.98)	132 (5.20)	69 (2.72)	0,85 (2)
25	26 (1.02)	29 (1.14)	50,5 (1.99)	114 (4.49)	165 (6.50)	69 (2.72)	1,00 (2)
40	38 (1.50)	41 (1.61)	50,5 (1.99)	139 (5.47)	194 (7.64)	88 (3.46)	2,20 (5)
50	50 (1.97)	53 (2.09)	64 (2.52)	155 (6.10)	194 (7.64)	97 (3.82)	3,65 (8)
65	66 (2.60)	70 (2.76)	91 (3.58)	197 (7.76)	251 (9.88)	131 (5.16)	7,65 (17)
80	81 (3.12)	85 (3.35)	106 (4.17)	229 (9.02)	251 (9.88)	144 (5.67)	10,55 (23)
100	100 (3.94)	104 (4.10)	119 (4.69)	243 (9.57)	332 (13.07)	172 (6.77)	19,15 (42)

VALVE SIZE INCH	DIMENSIONS MM (IN)						WEIGHT KG (LBS)
	Di	Da (WELD)	Da (CLAMP)	F	L	H	
0.50	9,4 (0.37)	12,7 (0.50)	25 (0.98)	88 (3.46)	132 (5.20)	64 (2.52)	0,75 (1.5)
0.75	15,8 (0.62)	19,1 (0.75)	25 (0.98)	101 (3.98)	132 (5.20)	69 (2.72)	0,85 (2)
1.00	22,2 (0.87)	25,4 (1.00)	50,5 (1.99)	114 (4.49)	165 (6.50)	69 (2.72)	1,00 (2)
1.50	34,9 (1.37)	38,1 (1.50)	50,5 (1.99)	139 (5.47)	194 (7.64)	88 (3.46)	2,20 (5)
2.00	47,6 (1.87)	50,8 (2.00)	64 (2.52)	155 (6.10)	194 (7.64)	97 (3.82)	3,65 (8)
2.50	60,3 (2.37)	63,5 (2.50)	77,5 (3.05)	197 (7.76)	251 (9.88)	131 (5.16)	7,65 (17)
3.00	72,9 (2.87)	76,1 (3.00)	91 (3.58)	229 (9.02)	251 (9.88)	144 (5.67)	10,55 (23)
4.00	97,6 (3.85)	101,6 (4.00)	119 (4.69)	243 (9.57)	332 (13.07)	172 (6.77)	19,15 (42)

### BLV1 - HL - DN15-100; 0.50" - 4"

#### Ball valve, manually operated, with feedback



DN15 - 50; 0.50" - 2.00"

DN65 - 100; 2.50" - 4.00"

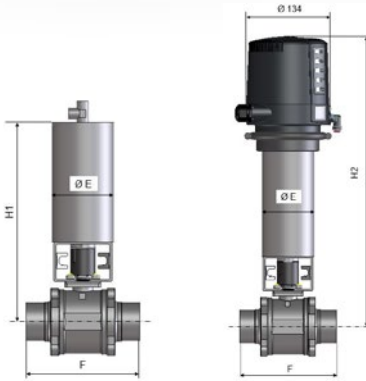
VALVE SIZE DN (INCH)	DIMENSIONS MM (IN)		WEIGHT KG (LBS)
	H	L	
15 (0.50)	132 (5.20)	165 (6.50)	4,9 (11)
20 (0.75)	137 (5.39)	165 (6.50)	5,1 (11)
25 (1.00)	140 (5.51)	165 (6.50)	5,3 (11.5)
40 (1.50)	154 (6.06)	165 (6.50)	6,4 (14)
50 (2.00)	162 (6.38)	165 (6.50)	7,8 (17)
65 (2.50)	234 (9.21)	251 (9.88)	17,9 (39.5)
80 (3.00)	247 (9.72)	251 (9.88)	20,8 (46)
100 (4.00)	275 (10.83)	332 (13.07)	38,2 (84)



**PRODUCT DIMENSIONS (CONTINUED):**

**BLV1 - NC/FZ - DN15-100; .50"-4.00"**

**Ball valve, actuated, with turning actuator / control unit**



VALVE SIZE DN (INCH)	DIMENSIONS MM (IN)				WEIGHT KG (LBS) WITHOUT CU	WEIGHT KG (LBS) WITH CU
	F	E	H1	H2		
15 (0.50)	88 (3.46)	85 (3.35)	250 (9.84)	429 (16.89)	3,7 (8)	4,9 (11)
20 (0.75)	101 (3.98)	85 (3.35)	255 (10.03)	434 (17.09)	3,9 (8.5)	5,1 (11)
25 (1.00)	114 (4.49)	85 (3.35)	258 (10.16)	437 (17.20)	4,1 (9)	5,3 (11.5)
40 (1.50)	139 (5.47)	85 (3.35)	272 (10.71)	451 (17.76)	5,2 (11.5)	6,4 (14)
50 (2.00)	155 (6.10)	85 (3.35)	280 (11.02)	459 (18.07)	6,6 (14.5)	7,8 (17)
65 (2.50)	197 (7.76)	135 (5.31)	382 (15.04)	561 (22.09)	16,7 (39)	17,9 (39.5)
80 (3.00)	229 (9.02)	135 (5.31)	392 (15.43)	571 (22.48)	19,6 (43)	20,8 (46)
100 (4.00)	243 (9.57)	189 (7.44)	453 (17.83)	632 (24.88)	37,0 (81.5)	38,2 (84)

**ADDITIONAL TECHNICAL DATA:**

**Maximum Tightening Torque and Actuator Sizes**

BALL VALVE	NOMINAL DIMENSION							
DN	15	20	25	40	50	65	80	100
INCH	0.50"	0.75"	1.00"	1.50"	2.00"	2.50"	3.00"	4.00"
Turning Actuator Size	K080				K125			K180
Tightening Torque (Nm)	5,0	6,5	9,5	18,0	23,5	59,5	64	96

Based in Charlotte, North Carolina, SPX FLOW, Inc. (NYSE: FLOW) is a multi-industry manufacturing leader. For more information, please visit [www.spxflow.com](http://www.spxflow.com)

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Design features, materials of construction and dimensional data, as described in this bulletin, are provided for your information only and should not be relied upon unless confirmed in writing. Please contact your local sales representative for product availability in your region. For more information visit [www.spxflow.com](http://www.spxflow.com).

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