

# **Beaver Two-Piece Flanged Ball Valve**

A split body valve with a floating ball and firesafe design used in corrosive and non-corrosive applications.

B21, B22, B23







Beaver B21 Ball Valve

## Beaver B21-B23 Two-Piece Flanged Ball Valve

This range of Beaver flanged floating ball valve consists of a ball sandwiched between two seats that seal against the inlet and outlet ports. In-line pressure naturally pushes the floating ball against the downstream seat, ensuring seal-tightness. It also features a special firesafe graphite gasket.

The Beaver two-piece flanged ball valve complies with API and ASME/ANSI standards and is suitable for handling a variety of fluids in in oil, petrochemical, chemical, gas, and general process.

#### **KEY FEATURES**

- Available as full or reduced bore in Class 150, 300, and 600 with ISO 5211 actuator mounting.
- Built-in anti-static device prevents static that can generate harmful sparks from building up on the valve.
- Blow-out proof stem prevents the stem from being ejected from the body in the unlikely event of valve failure.
- Requires low operating torque for cost-effective actuation.
- Lockout tab prevents accidental activation of a valve under maintenance.

Need technical advice? Our friendly specialists are here to help.

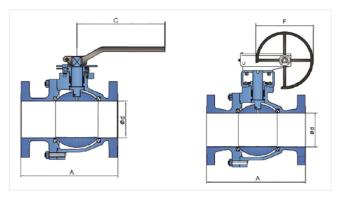
## **Two-Piece Flanged Class 150 Ball Valve**

#### Tables 1-2. B21 Specifications

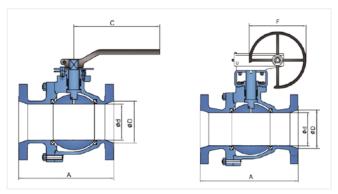
Standard Materials								
Part	Stainless steel valve							
Body/cap	A216 WCB	A351 CF8M						
Ball/stem	316 SS	316 SS						
Seats	RPTFE	RPTFE						

	Face-to-Face Dimensions							
Face to face	ASME B16.10 long pattern							
End flange	ASME B16.5							
Rating	ASME Class 150							

#### **Diagram 1. Full Bore Parts**



#### **Diagram 2. Reduced Bore Parts**



**Table 3. B21 Full Bore Dimensions** 

	Product Dimensions (mm)										
Size	20	25	40	50	65	80	100	150	200	250	300
Bore size (d)	19.05	25.40	38.10	50.80	63.50	76.20	101.60	152.40	203.20	254.00	304.80
Face to face (A)   RF	117.09	127.00	165.10	178.05	191.01	202.95	229.11	393.95	456.95	532.89	610.11
Handle length (C)	184.91	184.91	249.94	249.94	400.05	400.05	459.99	852.42			
Handwheel diameter (F)								400.05	459.99	599.95	599.95
Approx. weight (kg)	3.63	4.99	6.80	10.89	14.51	21.77	39.92	90.72	198.22	321.60	512.56

**Table 4. B21 Reduced Bore Dimensions** 

	Product Dimensions (mm)										
Size	50	65	80	100	150	200	250	300			
Bore size (d)	38.10	50.80	63.50	76.20	101.60	152.40	203.20	254.00			
Face to face (A)   RF	191.01	202.95	229.11	393.95	456.95	532.89	610.11				
Handle length (C)	249.94	400.05	400.05	400.05	459.99	849.88					
Handwheel diameter (F)						400.05	500.13	599.95			
Approx. weight (kg)	9.98	15.42	16.78	28.58	79.38	140.61	190.96	306.63			

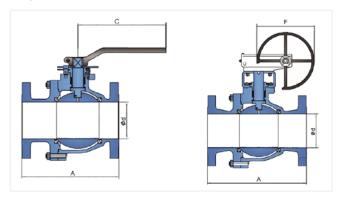
### **Two-Piece Flanged Class 300 Ball Valve**

#### Tables 1-2. B22 Specifications

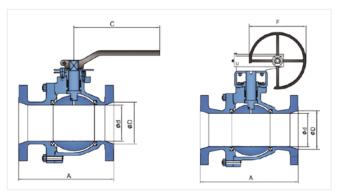
Standard Materials								
Part	Carbon steel valve	Stainless steel valve						
Body/cap	A216 WCB	A351 CF8M						
Ball/stem	316 SS	316 SS						
Seats	RPTFE	RPTFE						

	Face-to-Face Dimensions								
Face to face	ASME B16.10 long pattern								
End flange	ASME B16.5								
Rating	ASME Class 300								

#### **Diagram 1. Full Bore Parts**



#### **Diagram 2. Reduced Bore Parts**



**Table 3. B22 Full Bore Dimensions** 

	Product Dimensions (mm)										
Size	20	25	40	50	65	80	100	150	200	250	300
Bore size (d)	19.05	25.40	38.10	50.80	63.50	76.20	101.60	152.40	203.20	254.00	304.80
Face to face (A)   RF	151.89	165.10	189.99	215.90	241.05	282.96	305.05	456.95	501.90	567.94	647.95
Handle length (C)	184.91	184.91	184.91	249.94	400.05	400.05	795.02	795.02			
Handwheel diameter (F)								400.05	500.13	700.02	700.02
Approx. weight (kg)	3.63	4.99	6.80	13.61	25.40	33.11	52.16	121.56	215.00	403.70	646.82

**Table 4. B22 Reduced Bore Dimensions** 

	Product Dimensions (mm)											
Size	50	65	80	100	150	200	250	300				
Bore size (d)	38.10	50.80	63.50	76.20	101.60	152.40	203.20	254.00				
Face to face (A)   RF	215.90	241.05	282.96	305.05	456.95	501.90	567.94					
Handle length (C)	249.94	400.05	400.05	400.05	795.02	795.02						
Handwheel diameter (F)						400.05	500.13	599.95				
Approx. weight (kg)	14.06	29.48	50.35	28.58	79.38	143.79	274.42	530.70				

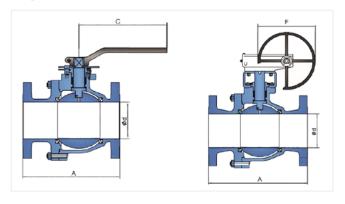
## **Two-Piece Flanged Class 600 Ball Valve**

#### Tables 1-2. B23 Specifications

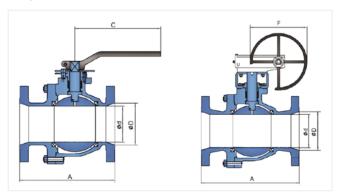
Standard Materials								
Part	Carbon steel valve	Stainless steel valve						
Body/cap	A216 WCB	A351 CF8M						
Ball/stem	316 SS	316 SS						
Seats	RPTFE	RPTFE						

Face-to-Face Dimensions							
Face to face	ASME B16.10						
End flange	ASME B16.5						
Rating	ASME Class 600						

#### **Diagram 1. Full Bore Parts**



#### **Diagram 2. Reduced Bore Parts**



**Table 3. B23 Full Bore Dimensions** 

Product Dimensions (mm)										
Size	25	40	50	80	100	150				
Bore size (d)	25.40	38.10	50.80	76.20	101.60	152.40				
Face to face (A)   RF	215.90	241.05	292.10	356.11	432.05	559.05				
Handle length (C)	184.91	249.94	400.05	800.10	899.92	899.92				
Handwheel diameter (F)										
Approx. weight (kg)	4.99	13.61	17.69	29.48	63.05	122.47				

**Table 4. B23 Reduced Bore Dimensions** 

Product Dimensions (mm)										
Size	50	80	100	150						
Bore size (d)	38.10	50.80	76.20	101.60						
Face to face (A)   RF	292.10	356.11	432.05	559.05						
Handle length (C)	400.05	800.10	899.92	899.92						
Handwheel diameter (F)										
Approx. weight (kg)	17.69	29.48	63.05	122.47						



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