

# **PBV Ball Valves Two Piece Flanged Trunnion Supported Ball Valves**

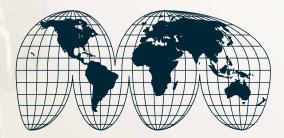
# **REQUEST A QUOTE**

sales@dkamans.com

## **SCHEDULE SERVICES** 562-529-8400

WWW.DKAMANS.COM

### Manufacturer of Quality Valve Products Around the Globe



At Forum<sup>™</sup> Energy Technologies we are committed to improving our clients' operational and financial performance by supplying the most comprehensive range of valve products in the industry through our family of trusted valve brands.



#### **Engineering Expertise**

Forum™ utilizes the latest state of the art engineering software to provide custom design services for any application. Finite element analysis is just one of many Design Verification Tools FET uses for designing valves to specific customer requirements.



#### **CAD & NC Capabilities**

With FET's fast and efficient workflow, CAD drawings can be released to the network for manufacturing and purchasing. All computer generated machine programs can be quickly changed for weld overlays or other processes. The result is faster deliveries.



### **Accurate Inventories**

Daily cycle counting & order picking using wireless barcode guns and automated part delivery systems results in more accurate inventories and faster product delivery.



#### **Quality Control**

All FET Companies manufacture quality products designed and tested to meet the standards of Qualifying Authorities around the world. Advanced engineering and our Quality Management System assure that our valve products continue to exceed your expectations for performance.



#### **Customer Service**

Forum™'s Customer Service Department is fully staffed with trained customer service representatives ready to help you with your ordering information, technical specifications and logistics.

### PBV<sup>®</sup> Series 5800/6800 Two-Piece Flanged Trunnion Supported Ball Valve **The Professional Choice for Dependable, Long Lasting Service.**

### **Standard Features**

- WCB/WCC Bodies and Adapters
- O-Ring Stem Seal Design backed by Firesafe Seal
- Valves Built and tested to API 6D
- Valves meet ASME B16.34, B16.10, B16.5 and BS 5351
- ISO 5211 Compatible Mounting Pads
- Firesafe to API 607 or 6FA
- All Materials Meet NACE MR0175
- Emergency Seat and Stem Sealant Injection
- Carbon Steel with ENP Standard on Internal Trim (Ball, Seat and Stem)
- Locking Devices Standard for Lever or Gear Operated Valves
- Double Block & Bleed (DBB) in Both Opened and Closed Position
- Equipped with Drain Valve for DBB and Seat Integrity Verification

Due to upgrades in industry standards, material innovations and Forum<sup>™</sup>'s commitment to product advancement, data presented in this brochure is subject to change. Please contact your Forum<sup>™</sup> sales representative for updated and/or current drawings and material compliance.



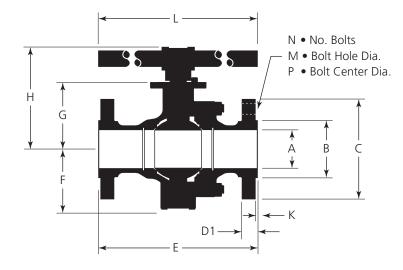
### Specifying PBV<sup>®</sup> Series 5800/6800 Valve Figure Numbers

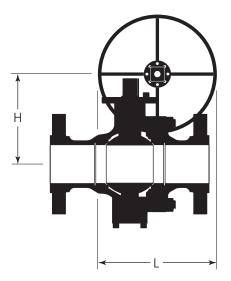
**Example: 6" C-6830-71-2200-DH-NG** This number represents a 6" ANSI Class 300, Full Port, Two-Piece Trunnion Ball Valve, Fire Tested with Emergency Grease Seals, with Raised Face, WCB Body Material, Carbon Steel with ENP Trim, Devlon<sup>®</sup> Seats, HNBR Seals, for NACE MR0175 Service and Gear Operated.

C ·	- 6	8	30	- 7	1 ·	- 22	00	- D	н	- N	G	-
Mat. Code	Port Config.	Valve Type	Press. Class	Fire Tested	End Conn.	Body Mat.	Trim Mat.	Seat Mat.	Seal Mat.	NACE Option	Oper.	Modifier Code
<b>C</b> Carbon Steel	5 Reduced 6 Full	<b>8</b> Two- Piece Trunn. Type	10 150 CL 30 300 CL 60 600 CL	<b>7</b> Fire Tested w/Emerg. Grease Seals	1 RF 3 RTJ	22 WCB/ WCC 28 LCC	00 Same as Body 36 316SS	D Devlon® or Equiv. G Glass Filled Teflon®	H HNBR	N NACE	A Act. B Bare Stem G Gear L Lever	

Note: Other body, trim, seat and seal materials are available upon request. Lever mounting pads are designed to dimensions in ISO 5211.

### PBV<sup>®</sup> Series 6800 Dimensional Data (in.), Full Port

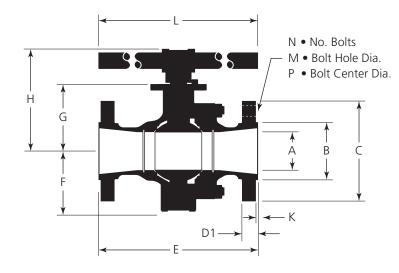


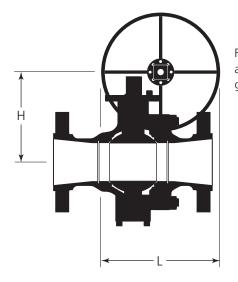


For Valves 6" and larger with gear operator

Size (in.)	Class	Α	В	с	D1	E	F	G	н	К	N	м	Р	L
	150	2.06	3.62	6.00	0.62	7.00	4.30	3.94	6.53	0.06	4	0.75	4.75	17.00
2	300	2.06	3.62	6.50	0.88	8.50	4.30	3.94	6.53	0.06	8	0.75	5.00	17.00
	600	2.06	3.62	6.50	1.25	11.50	4.30	4.13	6.41	0.25	8	0.75	5.00	20.00
	150	3.13	5.00	7.50	0.75	8.00	5.80	4.88	7.17	0.06	4	0.75	6.00	20.00
3	300	3.13	5.00	8.25	1.12	11.12	5.80	4.88	7.17	0.06	8	0.88	6.62	20.00
	600	3.13	5.00	8.25	1.50	14.00	5.80	5.38	9.28	0.25	8	0.88	6.62	28.00
	150	4.06	6.19	9.00	0.94	9.00	6.86	6.10	10.01	0.06	8	0.75	7.50	28.00
4	300	4.06	6.19	10.00	1.25	12.00	6.86	7.06	10.97	0.06	8	0.88	7.88	28.00
	600	4.06	6.19	10.75	1.75	17.00	6.86	7.06	10.97	0.25	8	1.00	8.50	28.00
	150	6.00	8.50	11.00	1.00	15.50	8.27	8.75	10.91	0.06	8	0.88	9.50	20.00
6	300	6.00	8.50	12.50	1.44	15.88	8.27	8.75	10.91	0.06	12	0.88	10.62	20.00
	600	6.00	8.50	14.00	2.13	22.00	8.27	8.75	10.91	0.25	12	1.13	11.50	20.00
	150	8.00	10.62	13.50	1.12	18.00	10.38	11.92	14.05	0.06	8	0.88	11.75	24.00
8	300	8.00	10.62	15.00	1.63	19.75	10.38	11.92	14.05	0.06	12	1.00	13.00	24.00
	600	8.00	10.62	16.50	2.25	26.00	10.38	11.92	14.05	0.25	12	1.25	13.75	24.00
	150	10.00	12.75	16.00	1.18	21.00	12.05	13.76	15.89	0.06	12	1.00	14.25	24.00
10	300	10.00	12.75	17.50	1.88	22.38	12.05	13.76	15.89	0.06	16	1.13	15.25	24.00
	600	10.00	12.75	20.00	2.75	31.00	12.05	13.76	15.89	0.25	16	1.38	17.00	24.00
	150	12.00	15.00	19.00	1.25	24.00	14.17	16.34	22.91	0.06	12	1.00	17.00	30.00
12	300	12.00	15.00	20.50	2.00	25.50	14.17	16.34	22.91	0.06	16	1.25	17.75	30.00
	600	12.00	15.00	22.00	2.88	33.00	14.17	16.34	22.91	0.25	20	1.38	19.25	30.00

### PBV<sup>®</sup> Series 5800 Dimensional Data (in.), Reduced Port

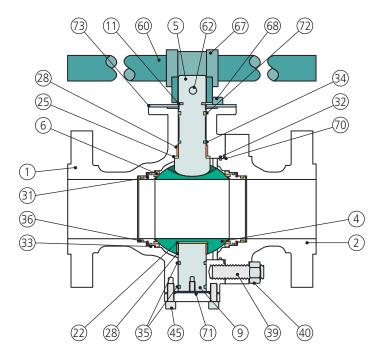




For Valves 8" and larger with gear operator

Size (in.)	Class	А	В	с	D1	E	F	G	н	К	N	м	Р	L
	150	3 x 2	5.00	7.50	0.75	8.0	4.30	3.94	6.53	0.06	4	0.75	6.00	17.00
3 x 2	300	3 x 2	5.00	8.25	1.12	11.1	4.30	3.94	6.53	0.06	8	0.88	6.62	17.00
	600	3 x 2	5.00	8.25	1.50	14.0	4.30	4.13	7.43	0.25	8	0.88	6.62	20.00
	150	4 x 3	6.19	9.00	0.94	9.0	5.80	4.88	8.80	0.06	8	0.75	7.50	20.00
4 X 3	300	4 x 3	6.19	10.00	1.25	12.0	5.80	4.88	8.19	0.06	8	0.88	7.88	20.00
	600	4 x 3	6.19	10.75	1.75	17.0	5.80	5.38	9.28	0.25	8	1.00	8.50	28.00
	150	6 x 4	8.50	11.00	1.00	15.5	6.86	6.10	10.01	0.06	8	0.88	9.50	28.00
6 X 4	300	6 x 4	8.50	12.50	1.44	15.9	6.86	7.06	10.97	0.06	12	0.88	10.63	28.00
	600	6 x 4	8.50	14.00	2.13	22.0	6.86	7.06	10.97	0.25	12	1.13	11.50	28.00
	150	8 x 6	10.62	13.50	1.12	18.0	8.27	8.75	10.91	0.06	8	0.88	11.75	18.00
8 X 6	300	8 x 6	10.62	15.00	1.63	19.8	8.27	8.75	10.91	0.06	12	1.00	13.00	18.00
	600	8 x 6	10.62	16.50	2.25	26.0	8.27	8.75	10.91	0.25	12	1.25	13.75	18.00
	150	10 x 8	12.75	16.00	1.18	21.0	10.38	11.92	14.05	0.06	12	1.00	14.25	24.00
10 x 8	300	10 x 8	12.75	17.50	1.88	22.4	10.38	11.92	14.05	0.06	16	1.13	15.25	24.00
	600	10 x 8	12.75	20.00	2.75	31.0	10.38	11.92	14.05	0.25	16	1.38	17.00	24.00
	150	12 x 10	15.00	19.00	1.25	24.0	12.05	13.76	15.89	0.06	12	1.00	17.00	24.00
12 x 10	300	12 x 10	15.00	20.50	2.00	25.5	12.05	13.76	15.89	0.06	16	1.25	17.75	24.00
	600	12 x 10	15.00	22.00	2.88	33.0	12.05	13.76	15.89	0.25	20	1.38	19.25	24.00

### PBV<sup>®</sup> Series 5800/6800 Parts & Materials



### Parts & Materials • Typical 4" 6800 Steel Valve

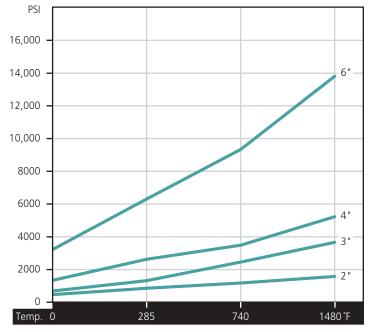
No.	Qty.	Description	Material/Carbon Steel	No.	Qty.	Description	Material/Carbon Steel
1	1	Body	A216-WCB/WCC	34*	2	O-Ring, Stem	HNBR
2	1	Adapter Cap	A216-WCB/WCC	35*	2	O-Ring, Trunnion	HNBR
4	1	Ball	A105/A350 LF2 ENP	36*	_	Packing	Graphite
5**	1	Stem	A105/A350 LF2 ENP	39	See Dim.	Stud	A193-B7M
6*	2	Seat Assembly	A105/A350 LF2 G/PTFE or Devlon®	40	See Dim.	Nut	A194-2HM
9	1	Trunnion	A105/A350 LF2 ENP	45	4	Cap Screw, Trunnion	A574 Modified
10	1	Trunnion Plate	A352-LCC	60	1	Handle	Carbon Steel
11**	1	Snap Ring	Stainless Steel	62	1	Handle Screw	F912
22**	1	Bearing	TFMC	67	1	Handle Adapter	Ductile Iron
25*	1	Stem Thrust Bearing	TFMC	68	1	Cap Screw, Stop	A574 Modified
28*	2	Bearing Washer	Steel/PTFE	70*	1	Gasket, Body	Graphite
31**	2	Spring	Inconel <sup>®</sup> X-750	71*	1	Gasket, Trunnion	Graphite
32*	1	O-Ring, Body	HNBR	72*	_	Packing, Stem	Graphite
33*	2	O-Ring, Seat	HNBR	73**	1	Stop Plate	Carbon Steel

Note: Recommended spare parts: \*after 2 yrs. service, \*\*after 5 yrs. service.

# PBV<sup>®</sup> Series 5800/6800

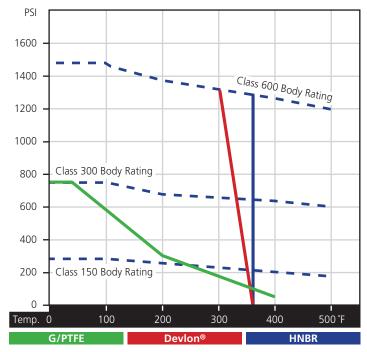
### Engineering Data

### Valve Break Torque • 2"-6" Port Size



### Valve Break Torque • 8"-12" Port Size PSI 50,000 12" 45,000 40,000 10" 35,000 30,000 25,000 20,000 8" 15,000 10,000 5000 0 740 285 1480°F Temp. 0

#### **Pressure Temperature**



### Product Range • 6800 Full Port, Flanged Ends

Shell	CL Design Feature		End	Size (in.)							
Material			Connect.	2	3	4	6	8	10	12	
WCB/WCC	150 End Entry		RF/RTJ	Х	Х	Х	Х	Х	Х	Х	
	300	End Entry	RF/RTJ	Х	Х	Х	Х	Х	Х	Х	
	600	End Entry	RF/RTJ	Х	Х	Х	Х	Х	Х	Х	

### Product Range • 5800 Reduced Port, Flanged Ends

Shell	CL	Design	End	Size (in.)						
Material	CL .	Feature	Connect.	3	4	6	8	10	12	
WCB/WCC	150 End Entry		RF/RTJ	Х	Х	Х	Х	Х	Х	
	300	End Entry	RF/RTJ	Х	Х	Х	Х	Х	Х	
	600	End Entry	RF/RTJ	Х	Х	Х	Х	Х	Х	

### Maximum Valve Break Torques (in.-lbs.)

Press.	Port Size (in.)											
psig	2	3	4	6	8	10	12					
0	540	720	1560	3180	6070	7530	11,230					
285	900	1440	2580	6120	10,560	12,770	15,860					
740	1320	2460	3600	9540	14,150	17,920	26,210					
1480	1620	3720	5220	13,800	17,380	35,400	46,670					

#### Note:

Break to Open Torque values are for new valves with clean water. No additional safety factors have been added.

For powered actuators it is recommended to add an additional 25% minimum. For dirty service add an additional 25% minimum. For dry gas service add 50% minimum.

To prevent stem side loading and eliminate potential stem galling the following tolerances for mounting actuators are recommended. Actuator mounting bracket flanges must be parallel within .015". The max allowed runout on the stem coupling bores are .008".

Our goal is to become the leading provider of mission critical oilfield products and related services in terms of customer satisfaction, safety and financial performance.

Our experienced management team and employees are dedicated to solving our customers' problems. We invest in long term relationships and cooperate on product development with our clients, we consider them our partners.

#### **OUR CORE VALUES**

**Integrity:** In everything we do, in every interaction, both internally and externally, we strive to operate with the upmost integrity and mutual respect.

**Long-term view:** We are building our company for the long-term, a company that we can be proud of.

**Open communication:** We believe partnerships with our customers and co-workers must be based on trust, professionalism and transparency.

**Customer focused:** Our products enhance our customer's performance and we listen to their needs and work with them to solve their challenges.

**Good place to work:** We are committed to creating a workplace that fosters innovation, teamwork and pride. Every team member is integral to our success and is treated equally and fairly.

No one gets hurt: The safety of our employees and customers is our first priority coupled with a healthy respect for the environment.

For more information about our products and full Terms & Conditions please visit www.f-e-t.com.





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