

“The Patch”, Quality Economical Valves  
Built for Extreme Oilfield Service



AGFT COMPANY

## Cast Oilpatch Floating Ball Valves

Series PA/PAH

Series PC/PCH/PCL/PCXH

Series PCSH and Series PE

Full and Reduced Port, Sizes 1" - 4"

750 - 5000 psi



*Their Options Are Our Standards*

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## PBV® Series PA/PAH Threaded Cast Floating Ball Valves • Features & Dimensional Data

“The Patch”, Quality Economical Valves  
Built for Extreme Oilfield Service

### Standard Features

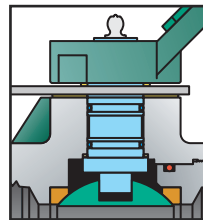
Series PA: 1" FP thru 4" RP at 1000 to 1500 psi WOG  
Series PAH: 1" FP thru 2" RP at 2000 psi WOG

- 316 Stainless Steel Trim
- Locking Devices for Added Security
- Two-Piece Construction
- Blowout Proof Stem Design
- Seats & Seals to Your Specifications
- Grease Fitting on Stem Allows Constant Lubrication and Protection Against Corrosion and Moisture
- Meets NACE MR0175 2002

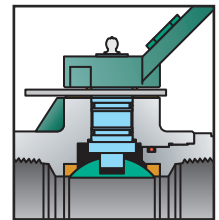


Series PA/PAH

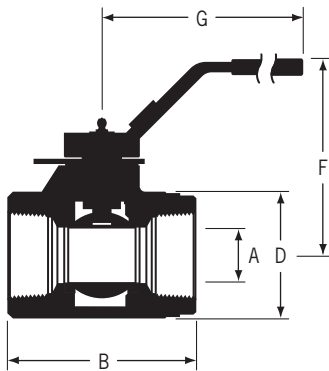
Blowout Proof Backseated  
Stem for Added Safety



Rugged Handle and Superior  
Wall Thickness for Tough  
Oilpatch Applications



### Dimensional Data (in.)

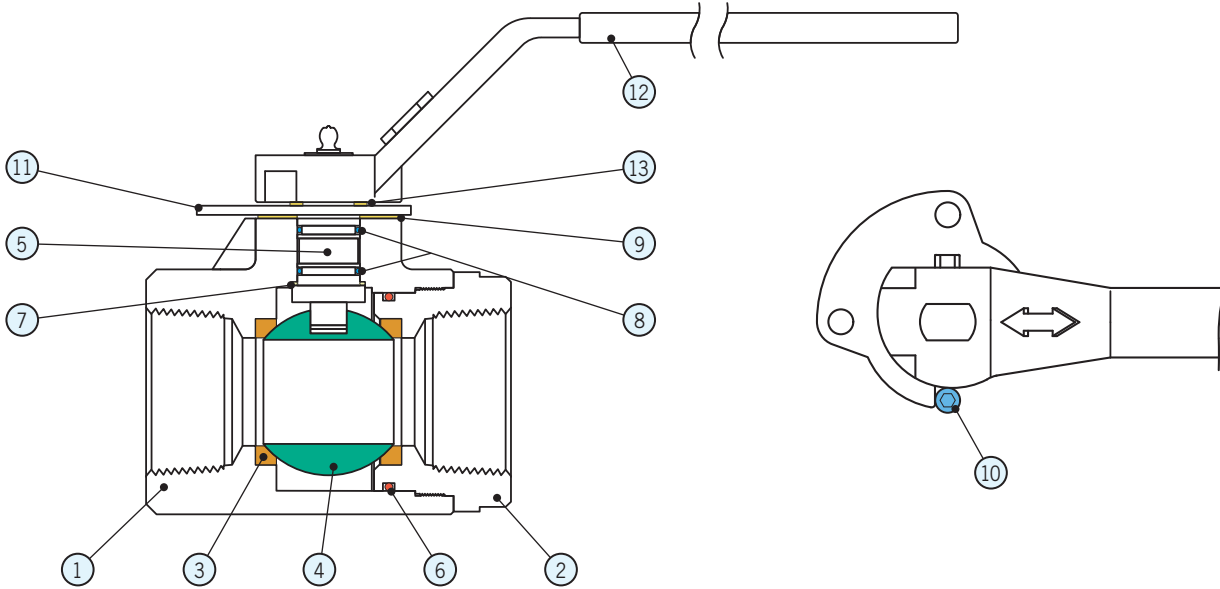


#### Series PA, ASTM A395 Ductile Iron

Size (in.)	Pressure (psi)	A	B	D	F	G	Weight (lbs.)	Valve Figure Numbers
1x1	1500	1	4	2 <sup>27</sup> / <sub>64</sub>	3 <sup>9</sup> / <sub>64</sub>	6 <sup>19</sup> / <sub>64</sub>	4	PA-NV
1½x1½	1500	1½	5½	3½	5 <sup>17</sup> / <sub>32</sub>	8½	13	PA-NV
2x1½	1500	1½	5½	3½	5 <sup>17</sup> / <sub>32</sub>	8½	13	PA-NV
2x2	1500	2	6	4 <sup>19</sup> / <sub>64</sub>	5 <sup>29</sup> / <sub>32</sub>	8½	20	PA-NV
2½x2½	1500	2 <sup>9</sup> / <sub>16</sub>	7	5 <sup>13</sup> / <sub>64</sub>	6 <sup>19</sup> / <sub>32</sub>	15	30	PA-NV
3x2	1500	2	7 <sup>19</sup> / <sub>64</sub>	4 <sup>29</sup> / <sub>64</sub>	5 <sup>29</sup> / <sub>32</sub>	8½	19	PA-NV
3x3	1000	3	8¾	5 <sup>5</sup> / <sub>8</sub>	6 <sup>7</sup> / <sub>8</sub>	15	44	PA-NV
4x3	1000	3	8¾	5 <sup>5</sup> / <sub>8</sub>	6 <sup>7</sup> / <sub>8</sub>	15	40	PA-NV

#### Series PAH, ASTM A395 Ductile Iron

Size (in.)	Pressure (psi)	A	B	D	F	G	Weight (lbs.)	Valve Figure Numbers
1x1	2000	1	4	2 <sup>27</sup> / <sub>64</sub>	3 <sup>9</sup> / <sub>64</sub>	6 <sup>19</sup> / <sub>64</sub>	4	PAH-NV
2x1½	2000	1½	5½	3½	5 <sup>17</sup> / <sub>32</sub>	8½	12	PAH-NV

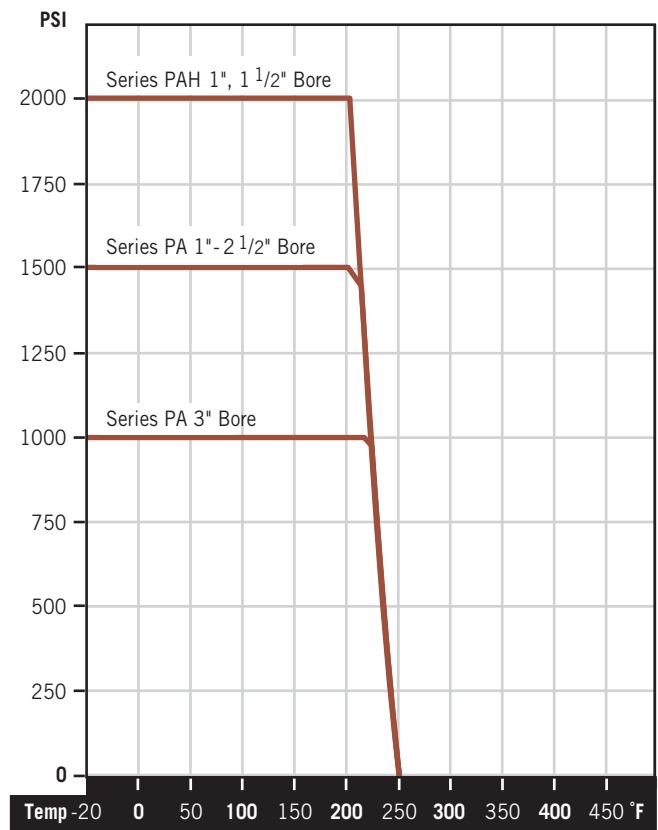


Parts & Materials

No.	Qty.	Description	Materials, Series PA/PAH
1	1	Body	ASTM A395 Ductile Iron
2	1	Adapter	ASTM A395 Ductile Iron
3	2	Seat	Nylon + MOS <sub>2</sub>
4	1	Ball	316 Stainless Steel
5	1	Stem	316 Stainless Steel
6	1	Body Seal	Viton®
7	1	Thrust Bearing	PTFE
8	2	Stem Seal	Viton®
9	1	Spacer	PTFE
10	1	Stop Screw	Steel
11	1	Stop Plate	Steel Cad. Plated
12	1	Handle	Carbon Steel
13	1	Retainer	Spring Steel

NOTE: We reserve the right to change materials and specifications.

Pressure Temperature



Break Torques (ft.-lbs.)

Size (in.)							
1x1	1 1/2 x 1 1/2	2 x 1 1/2	2 x 2	2 1/2 x 2 1/2	3 x 2	3 x 3	4 x 3
29	50	50	94	94	94	152	152

# PBV® Series PC/PCH/PCL/PCXH/PCSH Cast & SS Floating Ball Valves • Features & Dimensional Data

The Cast Solution for Pressures from 1500 to 5000 psi  
And All Stainless Steel PCSH for Corrosive Applications

## Standard Features

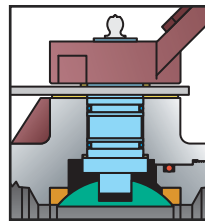
Series PC/PCL: 1" FP thru 4" RP at 1500 to 2500 psi WOG

Series PCH: 1" FP thru 2 1/2" RP at 3000 psi WOG

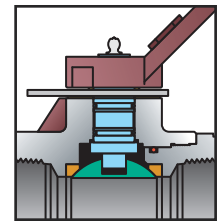
Series PCXH 2" RP at 5000 psi WOG

Series PCSH 2" RP and 2"FP at 3000 psi WOG

- 316 Stainless Steel Trim
- Locking Devices for Added Security
- Two-Piece Construction
- Blowout Proof Stem Design
- Seats & Seals to Your Specifications
- Grease Fitting on Stem Allows Constant Lubrication and Protection Against Corrosion and Moisture
- Meets NACE MR0175 2002

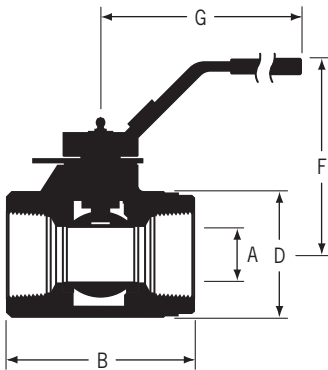


Blowout Proof Backseated Stem for Added Safety



Rugged Handle and Superior Wall Thickness for Tough Oilpatch Applications

## Dimensional Data (in.)



### Series PC, ASTM A216 Gr. WCB • Series PCL, ASTM A352 Gr. LCC

Size (in.)	Pressure (psi)	A	B	D	F	G	Weight (lbs.)	Valve Figure Numbers
1x1	2500	1	4	2 <sup>27</sup> / <sub>64</sub>	3 <sup>9</sup> / <sub>64</sub>	6 <sup>19</sup> / <sub>64</sub>	4	PC-NV
1 1/2 x 1 1/2	2500	1 1/2	5 1/2	3 1/2	5 <sup>17</sup> / <sub>32</sub>	8 1/2	14	PC-NV
2 x 1 1/2	2500	1 1/2	5 1/2	3 1/2	5 <sup>17</sup> / <sub>32</sub>	8 1/2	13	PC-NV
2x2	2160	2	6	4 <sup>19</sup> / <sub>64</sub>	5 <sup>29</sup> / <sub>32</sub>	8 1/2	20	PC-NV
2 1/2 x 2 1/2	2160	2 <sup>9</sup> / <sub>16</sub>	7	5 <sup>13</sup> / <sub>64</sub>	6 <sup>19</sup> / <sub>32</sub>	15	32	PC-NV
3x2	2160	2	7 <sup>19</sup> / <sub>64</sub>	4 <sup>29</sup> / <sub>64</sub>	5 <sup>29</sup> / <sub>32</sub>	8 1/2	23	PC-NV
3x3	1500	3	8 <sup>3</sup> / <sub>4</sub>	5 <sup>5</sup> / <sub>8</sub>	6 <sup>7</sup> / <sub>8</sub>	15	50	PC-NV
4x3	1500	3	8 <sup>3</sup> / <sub>4</sub>	5 <sup>5</sup> / <sub>8</sub>	6 <sup>7</sup> / <sub>8</sub>	15	45	PC-NV
4x4	750	4 <sup>1</sup> / <sub>16</sub>	9 <sup>3</sup> / <sub>8</sub>	7 1/2	7 <sup>7</sup> / <sub>8</sub>	18 <sup>7</sup> / <sub>64</sub>	71	PC-NV

### Series PCH, ASTM A216 Gr. WCB

Size (in.)	Pressure (psi)	A	B	D	F	G	Weight (lbs.)	Valve Figure Numbers
1x1	3000	1	4	2 <sup>27</sup> / <sub>64</sub>	3 <sup>9</sup> / <sub>64</sub>	6 <sup>19</sup> / <sub>64</sub>	4	PCH-NV
2 x 1 1/2	3000	1 1/2	5 1/2	3 1/2	5 <sup>17</sup> / <sub>32</sub>	8 1/2	13	PCH-NV
2x2	3000	2	6	4 <sup>19</sup> / <sub>64</sub>	5 <sup>29</sup> / <sub>32</sub>	8 1/2	20	PCH-NV

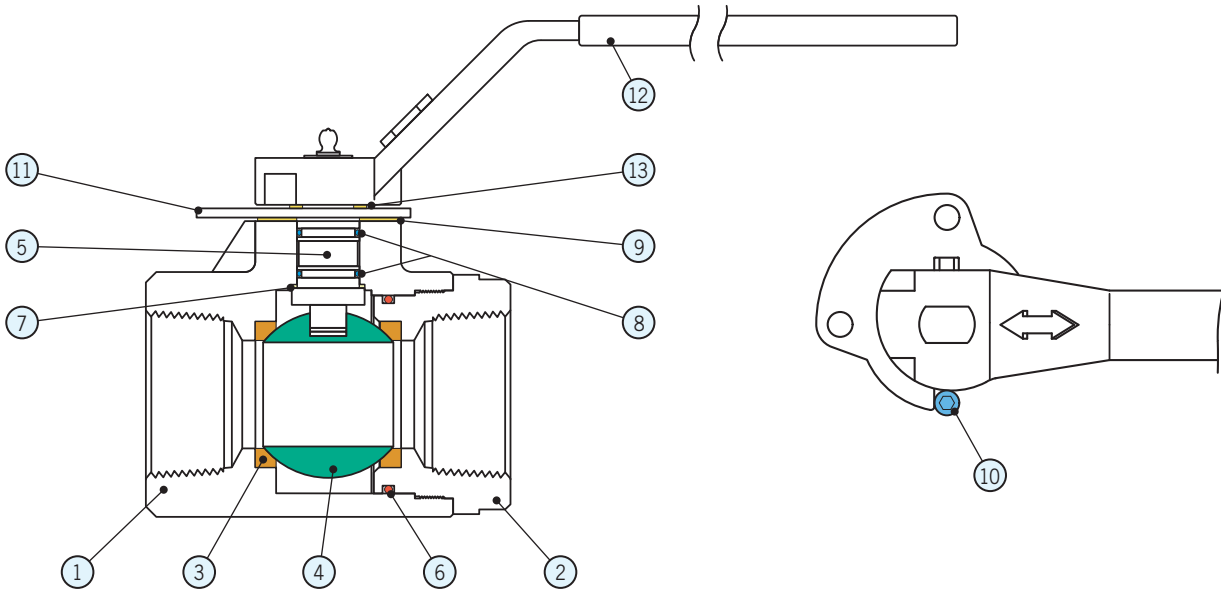
### Series PCXH, ASTM A216 Gr. WCB

Size (in.)	Pressure (psi)	A	B	D	F	G	Weight (lbs.)	Valve Figure Numbers
2 x 1 1/2	5000	1 1/2	5 1/2	3 1/2	5 <sup>17</sup> / <sub>32</sub>	8 1/2	15	PCXH-NV

### Series PCSH, Stainless Steel CF8M

Size (in.)	Pressure (psi)	A	B	D	F	G	Weight (lbs.)	Valve Figure Numbers
2 x 1 1/2	3000	1 1/2	5 1/2	3 1/2	5 <sup>17</sup> / <sub>32</sub>	8 1/2	14	PCSH-NV
2x2	3000	2	6	4 <sup>19</sup> / <sub>64</sub>	5 <sup>29</sup> / <sub>32</sub>	8 1/2	20	PCSH-NV



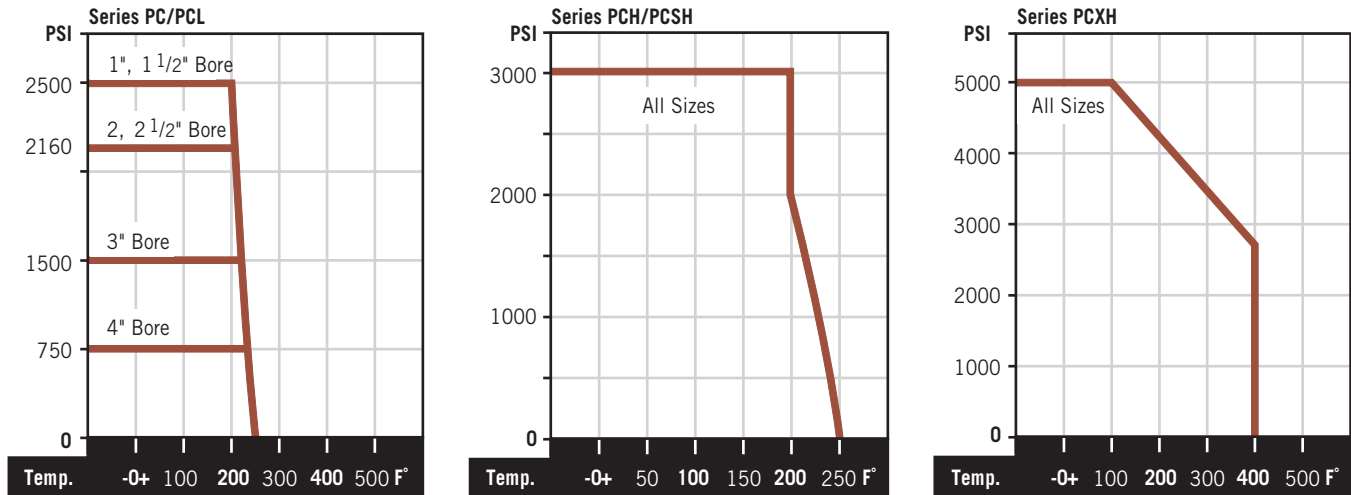


Parts & Materials

No.	Qty.	Description	Materials, Series PC/PCH	Materials, Series PCL	Materials, Series PCXH	Materials, Series PCSH
1	1	Body	ASTM A216 Gr. WCB	ASTM A352 Gr. LCC	ASTM A216 Gr. WCB	Stainless Steel CF8M
2	1	Adapter	ASTM A216 Gr. WCB	ASTM A352 Gr. LCC	ASTM A216 Gr. WCB	Stainless Steel CF8M
3	2	Seat	Nylon + MOS <sub>2</sub>	Nylon + MOS <sub>2</sub>	PEEK™	Nylon + MOS <sub>2</sub>
4	1	Ball	316 Stainless Steel	316 Stainless Steel	316 Stainless Steel	316 Stainless Steel
5	1	Stem	316 Stainless Steel	316 Stainless Steel	316 Stainless Steel	316 Stainless Steel
6	1	Body Seal	Viton®	Low Temp Buna	Viton®	Viton®
7	1	Thrust Bearing	PTFE	PTFE	PTFE	PTFE
8	2	Stem Seal	Viton®	Low Temp Buna	Viton®	Viton®
9	1	Spacer	PTFE	PTFE	PTFE	PTFE
10	1	Stop Screw	Steel	Steel	Steel	Steel
11	1	Stop Plate	Steel Cad. Plated	Steel Cad. Plated	Steel Cad. Plated	Steel Cad. Plated
12	1	Handle	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel
13	1	Retainer	Spring Steel	Spring Steel	Spring Steel	Spring Steel

NOTE: We reserve the right to change materials and specifications.

Pressure Temperature



Break Torques (ft.-lbs.)

Size (in.)								
1x1	1½x1½	2x1½	2x2	2½x2½	3x2	3x3	4x3	4x4
29	50	50	94	94	94	152	152	250

The Economical Solution for Pressures from 750 to 1000 psi

Standard Features

Series PE: 2," 3" and 4" RP at 750 to 1000 psi WOG

- 316 Stainless Steel Trim
- Two-Piece Construction
- Blowout Proof Stem Design
- Seats & Seals to Your Specifications
- Grease Fitting on Stem Allows Constant Lubrication and Protection Against Corrosion and Moisture
- Reinforced Second Generation High Performance Teflon® TFM Seat
- Meets NACE MR0175 2002



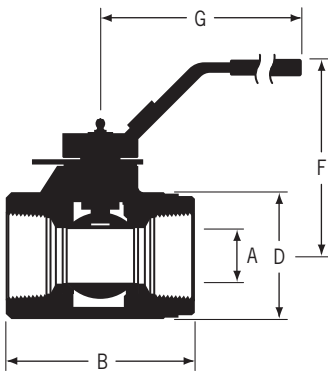
Dual Locking Devices are Standard for Material Custody Transfer Applications



Ideally Suited for Tank Battery & Production Lines Replacing Lubricated Cast Iron Plug Valves



Dimensional Data (in.)



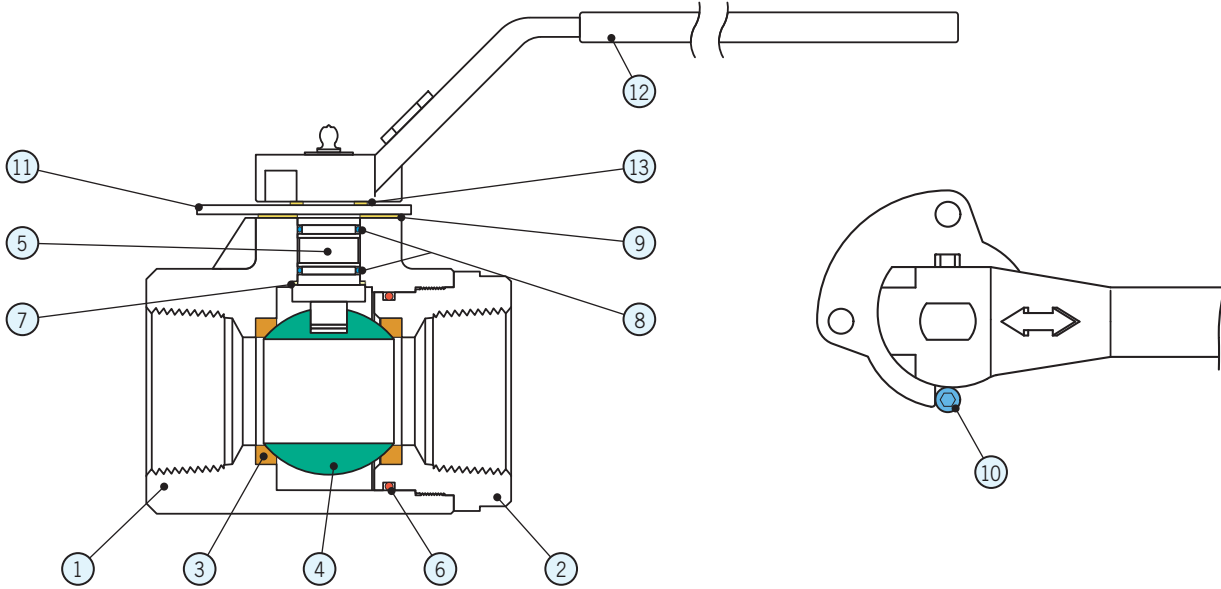
Series PCH, ASTM A216 Gr. WCB

Size (in.)	Pressure (psi)	A	B	D	F	G	Weight (lbs.)	Valve Figure Numbers
2x1 1/2	1000	1 1/2	5 1/2	3 1/2	5 17/32	8 1/2	13	PE-CV
3 x 2	750	2	7 19/64	4 29/64	5 29/32	8 1/2	17	PE-CV
4 x 3	750	3	8 3/4	5 5/8	6 7/8	15	36	PE-CV



All PBV® Valves are Manufactured in Strict Conformance With the Following Industry Standards:

- ISO 9001 Quality System
- NACE MR0175 2002 Sulfide Stress Cracking Resistant Metallic Materials for Oilfield Equipment
- Canadian Registration Number (CRN) Products Registered in all Provinces and Territories

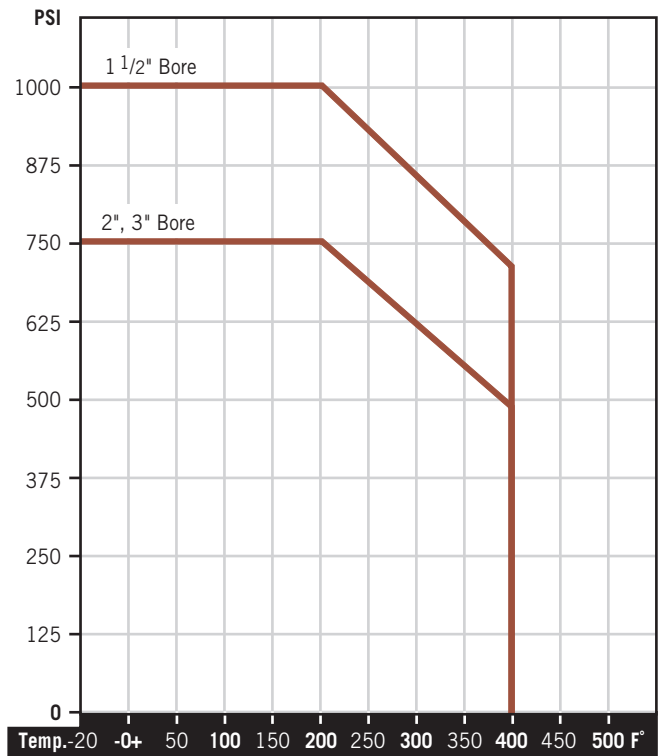


Parts & Materials

No.	Qty.	Description	Materials, Series PE
1	1	Body	ASTM A395 Ductile Iron
2	1	Adapter	ASTM A395 Ductile Iron
3	2	Seat	TFMC
4	1	Ball	316 Stainless Steel
5	1	Stem	316 Stainless Steel
6	1	Body Seal	Viton®
7	1	Thrust Bearing	PTFE
8	2	Stem Seal	Viton®
9	1	Spacer	PTFE
10	1	Stop Screw	Steel
11	1	Stop Plate	Steel Cad. Plated
12	1	Handle	Carbon Steel
13	1	Retainer	Spring Steel
14	1	Chain	Carbon Steel
15	1	Ribbon Lock	Copper Tube

NOTE: We reserve the right to change materials and specifications.

Pressure Temperature



Break Torques (ft.-lbs.)

Size (in.)		
2 x 1 1/2	3 x 2	4 x 3
50	94	152

## PBV® General Terms and Conditions of Sale

By acceptance of the goods described herein, the Purchaser expressly acknowledges and agrees to the following general terms and conditions of sale (the "Terms and Conditions"):

- 1. Warranty:** The warranty described below applies only to new or unused goods or goods reconditioned by PBV® Valve (Seller). The Seller specifically disclaims any warranty for used goods or goods sold as is. For a period of one (1) year after date of shipment of any of the goods described herein, Seller warrants such goods shall remain free from failure due to defects in workmanship and materials incorporated therein by or for Seller provided such failure shall not have been caused or contributed to by improper usage, storage, service application, installation or maintenance, repairs, alterations, or modifications effected by or for the user; or misuse, negligence or accident. In the event of failure for which Seller has assumed warranty obligations hereunder, and provided Purchaser provides written notification of such failure immediately to Seller, Seller agrees to repair, or at its option, to replace the goods sold at its sole expense. Apart from the warranty and undertaking above set forth, or unless otherwise specifically consented to in writing by Seller, Seller assumes no obligation or liability for losses, expenses or damages, direct or consequential, suffered or incurred as a result of any failure of, or defect in, the goods described herein, including but not limited to, such losses, expenses or damages as may result from the necessity to remove, replace, restore or transport the goods from any location or service in which they may be used, regardless of the cause of such failure or defect. This warranty extends only to the original Purchaser of the goods and is the only warranty made by Seller in connection herewith; provided, however, that if such original purchaser is a reseller or distributor of Seller's goods, such warranty shall also extend to any person or entity that purchases such goods directly from such reseller or distributor. There are no other warranties, express or implied, of any kind given with respect to the goods, their merchantability, fitness for any particular purpose or usage, or otherwise, nor is any person authorized to extend on behalf of Seller any form of warranty other than that above set forth. The goods described herein are not sold or distributed by Seller for personal, family or household purposes, nor are they normally suited for use as such.
- 2. Prices:** Prices and other terms of sale where set forth in current price sheets are subject to change without notice. Stenographic or clerical errors are subject to correction.
- 3. Acceptance of Orders and Assignment:** All orders are subject to acceptance by Seller at its home office, Stafford, Texas, only. No assignment of the Purchaser's rights or obligations under any purchase order may be made without the prior written consent of the Seller.
- 4. Terms, Payment and Partial Shipment:** All accounts are payable net 30 days from invoice date. Seller shall charge one percent (1%) per month interest charged on accounts after 30 days from invoice date, or twelve percent (12%) annually. All accounts are payable in United States dollars, free of exchange, collection, or any other charges. If in the sole discretion of Seller, the financial condition of the Purchaser at any time so requires, Seller retains the right to require full or partial payment in advance, to set spending limits for credit accounts or to require other adequate assurances of financial responsibility. Seller reserves the right to make partial shipments from time to time and render invoices therefore, which shall be due and payable as provided in said invoices.
- 5. Freight Charges:** Unless otherwise specifically noted, standard shipping charges (calculated by product weight, not including packaging) shall be added or be in addition to the price quoted and Purchaser agrees to pay the same to Seller.
- 6. Taxes:** Unless otherwise specifically noted, the amount of any sales, use, value added, occupancy, excise tax, or other tax, of any nature, federal, state, or local, for which Seller is legally liable, either initially or through failure of payment by Purchaser, shall be added or be in addition to the price quoted and Purchaser agrees to pay the same to Seller.
- 7. Unavoidable Conditions:** Seller shall not be liable for failure to deliver or delays in delivery occasioned by causes beyond its control, including, without limitation, strikes, lockouts, fires, embargoes, war or other outbreaks of hostilities, acts of God, inability to obtain shipping space, machinery, breakdowns, delays of carriers or suppliers, and governmental acts or regulations.
- 8. Returns and Cancellations:** Return requests must be made within 90 days of shipment, and no product may be returned without a prior written Returned Goods Authorization (RGA) form signed by Seller and freight prepaid by Purchaser. All standard materials returned are subject to a handling charge, freight in both directions, a 25% minimum restocking fee and charges for any required reconditioning, clean up or re-certification, unless otherwise specified in writing by Seller. All returned standard materials are subject to inspection and final disposition by Seller's quality department. Special material items, buyouts, and modified products are non-returnable. Overages, shortages and incorrect material claims must be made in writing within ten (10) days of receipt of goods. Cancellation of orders once placed with and accepted by Seller may be made only with its written consent. Cancellation of orders are subject to a cancellation charge to be determined by impact at time of cancellation or modification of order. Cancellation of non-standard material or excessive quantities as determined by Seller may incur up to 100% cancellation charge depending on stage of work in progress.
- 9. No Waiver:** Seller's failure to insist upon compliance with any of the terms, covenants, or conditions listed herein or to exercise any right hereunder shall not be construed as a waiver or relinquishment of the future performance of any such term, covenant or condition, or the future exercise of such right or a waiver or relinquishment or waiver of any other term, covenant or condition or the exercise of any other rights hereunder.
- 10. Drawings, Data and Confidential Information:** The weights, dimensions, capacities, prices, performance ratings and other data included in catalogues, prospectuses, circulars, advertisements, illustrated matter and price lists constitute a guide. These data shall not be binding except to the extent that they are by reference expressly included in the purchase order. Any drawings or technical documents intended for use in the manufacture or construction of machinery, equipment, plants, parts, or other material and any ancillary services associated therewith, or any part thereof, and submitted to the Purchaser prior or subsequent to the formation of the purchase order (the "Material"), remain the exclusive property of the Seller; provided however, that the Material shall become the property of the Purchaser only if the Purchaser and Seller agree in writing. The Material shall not, without the Seller's consent, be utilized by the Purchaser or copied, reproduced transmitted or communicated to an unauthorized third party.
- 11. Governing Law:** This contract shall be governed by, construed and enforced in accordance with the laws of the State of Texas, without regard to its conflicts of law rules that would apply the laws of any other jurisdiction.
- 12. Totality of Agreement, Special Provisions, Modifications, Severability:** These Terms and Conditions constitute the entire agreement of the parties with respect to all matters and things herein mentioned. Purchaser warrants, represents and agrees that it has inspected the goods and otherwise made inquiry and review, upon its own behalf, concerning the nature, characteristics and quality of the materials and workmanship incorporated therein at or prior to delivery, that it is fully contented and satisfied therewith and has independently determined that the goods are in all respects fit and usable for all purposes for which they are intended to be employed by Purchaser. It is expressly acknowledged and agreed by and between the parties that neither party has, nor is now, relying upon any collateral, prior or contemporaneous agreement, written or oral, assurance or assurances, representations or warranties, of any kind or nature as to or respecting the condition or capabilities of the goods and the other matters and things, rights and responsibilities herein fixed and described. No modification, waiver or discharge of any term or provision of these Terms and Conditions shall be implied by law, nor shall any alteration, modification or acquittance of any such term or provision be effective for any purpose unless signed in writing by or on behalf of the party charged therewith. All products are subject to prior sales. All sales are subject to these [Terms & Conditions](#).
- 13. Export Regulations:** Seller's products can only be exported in accordance with U.S. Export Administration Regulations and other U.S. legal requirements. Diversion contrary to U.S. law is prohibited.

Represented By:



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