

# 600 Series (CvMax)

UHP Stainless Steel Bellows Valve  
Manual & Pneumatic

aerospace  
climate control  
electromechanical  
filtration  
fluid & gas handling  
hydraulics  
pneumatics  
process control  
sealing & shielding

## Value Proposition:

Parker Hannifin Corporation's Veriflo Division presents the 600 Series Bellows Valves. These valves are manufactured specifically for Ultra High Purity Gas Systems.

Parker Bellows Valves are designed with the industry's leading straight-through full flow. There are no restricted paths or bends that would reduce flow and generate particulate. These features provide the highest gas flow with minimal pressure drop.



## Contact Information:

Parker Hannifin Corporation  
**Veriflo Division**  
250 Canal Blvd  
Richmond, California 94804

phone 510 235 9590  
fax 510 232 7396  
veriflo.sales@parker.com

www.parker.com/veriflo  
Mobile App: m.parker.com/veriflo

## Product Features:

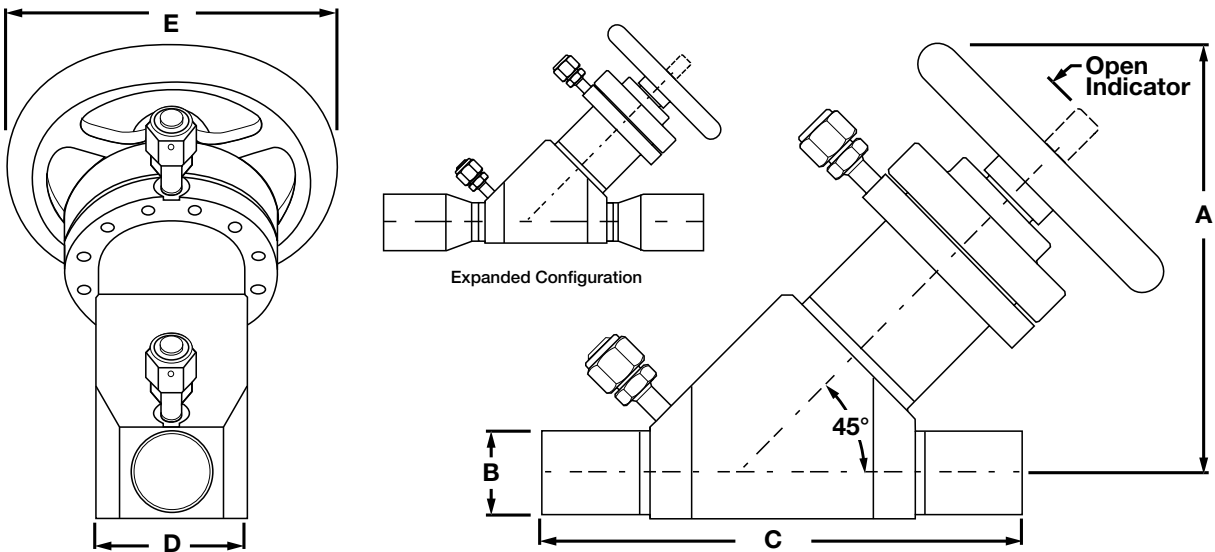
- Standard surface finish of 10 micro inch Ra
- Fully functional from vacuum to 375 psig
- Serialized and heat code traceable
- 100% Helium leak tested
- Optimum purge port locations
- Standard full internal electroplish
- Inconel 625<sup>®</sup> bellows for increased pressure, ultra high purity and maximum cycle life in a small envelope
- Vericlean<sup>™</sup>, Veriflo's low sulfur high purity 316L Stainless Steel enhances electropolishing, welding, and corrosion resistance



ENGINEERING YOUR SUCCESS.

# 600 Series

## Dimensional Drawings



Part Number	C <sub>v</sub>	X <sub>t</sub>	Body Tube		Straight Expanded	A (Height)		B (Tube O.D.)		B (Tube Wall)		C (Length)		D (Body Width)		E (Handle Dia.)	
			inch	mm		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
UHP0608**0808**AS*	35	.236	1.00	25.4	St	5.7	144	1.00	25.4	0.065	1.65	10.1	257	2.00	51	3.75	95
UHP0608**1212**AS*	28	.319	1.00	25.4	Ex	5.7	144	1.50	38.1	0.065	1.65	12.1	308	2.00	51	3.75	95
UHP0612**1212**AS*	81	.241	1.50	38.1	St	8.0	203	1.50	34.1	0.065	1.65	16.11	409	3.12	74	6.00	152
UHP0612**1616**AS*	91	.183	1.50	38.1	Ex	8.0	203	2.00	50.8	0.065	1.65	16.11	409	3.12	79	6.00	152
UHP0616**1616**AS*	178	.193	2.00	50.8	St	10.3	261	2.00	50.8	0.065	1.65	13.9	353	3.67	93	8.00	203
UHP0616**2424**AS*	134	.225	2.00	50.8	Ex	14.0	356	3.00	76.2	0.065	1.65	17.1	435	3.67	93	8.00	203

Note: C<sub>v</sub> and X<sub>t</sub> calculated per SEMI Flow Coefficient Standard Test Method.

# 600 Series

## Ordering Information

Build a 600 Series valve by replacing the numbered symbols with an option from the corresponding tables below.

Color Explanations: Black = Standard Lead Time Configurations  
Blue = Extended Lead Time Configurations

For an explanation of Ordering options please reference literature 25000275 at [www.parker.com/veriflo](http://www.parker.com/veriflo)

Sample: **UHP 06 08 C 1 0808 10 A S K**

Finished Order: **UHP0608C1080810ASK**

**1 Configuration**  
UHP = Straight Valve

**2 Basic Series**  
06 = 600 Series

**3 Body Size**  
08 = 1"  
12 = 1-1/2"  
16 = 2"

**4 Purge Port**  
A = None  
B = Upstream  
C = Up & Downstream  
D = Downstream  
J = Purge Valves Up & Downstream

**5 Actuation**  
Manual (handle color)  
1 = Blue  
Pneumatic  
A = Fail Close Actuation  
B = Double Acting Actuation  
*Consult Factory for additional Handle Colors*

**6 Inlet/Outlet Tube Size & Type**  
"08" Body Style  
0808 = 1" Tube Stub  
1212 = 1-1/2" Expanded Tube Stub  
"12" Body Style  
1212 = 1-1/2" Tube Stub  
1616 = 2" Expanded Tube Stub  
"16" Body Style  
1616 = 2" Tube Stub  
2424 = 3" Expanded Tube Stub

**7 Internal Surface Finish**  
10 = 10 Ra

**8 Generation**  
A = First Generation

**9 Purge Port Type**  
S = Standard Male Face Seal Fitting

**10 Seat Seal Materials**  
K = PCTFE  
V = Vespel®

Additional configurations available upon request.

# 600 Series

## Specifications

Materials of Construction	
<b>Wetted</b>	
Body	VeriClean™ 316L Stainless Steel
Tube Ends	316L Stainless Steel
Stem	VeriClean™ 316L Stainless Steel
Seat Retainer	VeriClean™ 316L Stainless Steel
Bellows Adapter	316L Stainless Steel
Bellows	Inconel 625®
Seat Options	PCTFE (std) or Vespel®
Bonnet Gasket	Nickel
<b>Non-wetted</b>	
<b>Pneumatic</b>	
Actuator Housing	Aluminum
Bonnet	Aluminum
Guide	Brass
<b>Manual</b>	
Handle	Aluminum
Bonnet	Aluminum
Guide	Brass
Driver	Bronze

Functional Performance	
<b>Flow Capacity</b>	See Table
<b>Leak Rate</b>	Inboard Test Method
Internal	$\leq 1 \times 10^{-10}$ scc/sec He
External	$\leq 1 \times 10^{-10}$ scc/sec He
<b>Surface Finish</b>	10 micro inch Ra
Operating Conditions	
Maximum Pressure	375 psig (25.9 barg)
Minimum Pressure	Vacuum
Maximum Temperature	
Closed	140°F (60°C)
Open	150°F (66°C)

Inconel® is a registered trademark of Special Metals Corporation  
 Vespel® is a registered trademark of DuPont Performance Elastomers L.L.C.  
 VeriClean™ is a trademark of Parker Hannifin Corporation

For additional information on materials of construction, functional performance and operating conditions, please contact factory.

### OFFER OF SALE:

The items described in this document are hereby offered for sale by Parker-Hannifin Corporation, its subsidiaries or its authorized distributors. This offer and its acceptance are governed by the provisions stated in the detailed "Offer of Sale" elsewhere in this document or available at [www.parker.com/veriflo](http://www.parker.com/veriflo)



FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE. THIS DOCUMENT IS FOR REFERENCE ONLY. PLEASE CONSULT FACTORY FOR LATEST PRODUCT DRAWINGS AND SPECIFICATIONS

This document and other information from Parker-Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

The products described herein, including without limitation, product features, specifications, designs, availability and pricing are subject to change by Parker Hannifin Corp and its subsidiaries at any time without notice.

Proposition 65 Warning: This product contains chemicals known to the state of California to cause cancer or birth defects or other reproductive harm.

© 2009 Parker Hannifin Corporation



Use mobile device to scan this QR Code.

LiPN: 25000273

Rev: B

Date of Issue 04/2013



ENGINEERING YOUR SUCCESS.