



HFCP SERIES

HFCP Series Product Applications

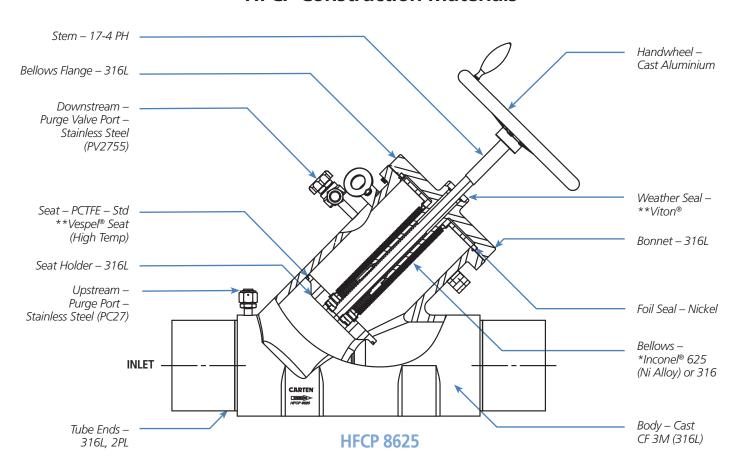
The HFCP series is designed for cost-efficient delivery of high-purity gases and distribution systems where high flows are demanded with high containment and safe delivery in critical process systems. The HFCP's high Cv capacity provides the best flow value and operational costs, and makes this range an excellent consideration for:

- High-purity process gas distribution systems
- Purifier systems
- Filter skid systems
- High-purity chemical distribution systems

HFCP Series Product Features

- Highest Cv in the Industry
- Ultra-High Purity Stainless Steel Gas Construction
- *Inconel® 625 Bellows for High Cycle Life and Superior Corrosion Resistance
- Electropolished 32 Ra Max Surface Finish Standard
- Industry Leader in Ultra-High Purity Gas Containment
- Purge Connections are Integrated in Valve Body
- Valve Body and Tube Ends are Serialized for Material Certification

HFCP Construction Materials



^{**}Vespel® and Viton® are registered trademarks of DuPont Company.

HFCP SERIES



HFCP Series Technical Data

MATERIAL OF CONSTRUCTION	Wetted Areas	CF3M, 316L SS, *Inconel® 625/316L, PCTFE, Nickel
	Non-Wetted Areas	17-4 PH, 316L SS, **Viton®, Aluminium, ABS
MAXIMUM OPERATING PRESSURE	HFCP Series	Vacuum-300 psig (21.0 bar)
MAXIMUM OPERATING TEMPERATURE	PCTFE Seat – Std **Vespel® Seat (High Temp)	-22°F (-30°C) to 180°F (82°C) 181°F (83°C) to 302°F (150°C)

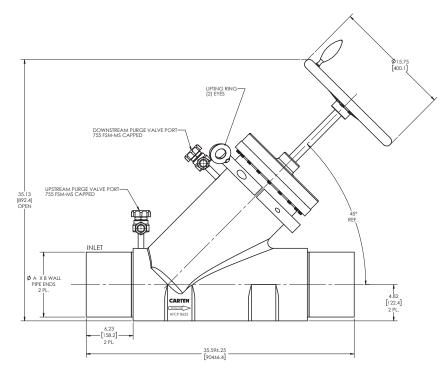
^{*}Inconel® is a registered trademark of Special Metals Corporation. **Vespel® and Viton® are registered trademarks of DuPont Company.

VALVE MODELS	BODY DATA	FLOW COEFFICIENT	VALVE MODELS	BODY DATA	FLOW COEFFICIENT
Series/Size (Inch)	Pipe/Body (Seat-Orifice) Sizes	(C _V)	Series/Size (JIS)	Pipe/Body (Seat-Orifice) Sizes	(C _V)
HFCP 8625	Ø8.625 / 8.625 (Ø8.625 in. (Ø219.1mm)-Orifice)	2024	HFCP 200A	Ø8.516 / 8.625 (Ø8.625 in. (Ø219.1mm)-Orifice)	1951
HFCP 1086	Ø10.75 / 8.625 (Ø8.625 in. (Ø219.1mm)-Orifice)	1679			
	CYCLE LIFE			>350 @ 300 Psig (21.0 bar)	

HELIUM LEAK TEST	Inboard Across the Seat Outboard Pressure Test	≤ 1 x 10 ⁻⁹ std.cc (atm) He / sec ≤ 1 x 10 ⁻⁹ std.cc (atm) He / sec ≤ 1 x 10 ⁻⁶ std.cc (atm) He / sec
CLEANLINESS AND PACKAGING	Assembled and tested in Class 100 Cleanroom. Purged and Final Packaged in Class 1 Cleanroom. Double-bag Packaging (2 mil nylon inner bag, 6 mil polyethylene outer bag) with Ultra-High Purity N_2 gas environment.	
STANDARD FINISH	32 Ra (0.80 μm) EP on all wetted surfaces	
NOTES AND OPTIONS	Surface Finish – BA (63 Ra Max.) Non EP Testing: Particle, Moisture, O ₂ , SEM, ESCA, and	d AES

Specifications are subject to change without notice.

HFCP Series Typical Valve Dimensions



SERIES SIZES	DIMENSIONS		
SEKIES SIZES	ØA	В	
8625	Ø 8.625	.148	
	(219.1mm)	(3.8mm)	
1086	Ø 10.75	.165	
	(273.1mm)	(4.2mm)	
200A	Ø 8.516	.157	
200A	(216.3mm)	(4.0mm)	

HFCP8625-PV2755 SHOWN

HFCP SERIES

HFCP Series Ordering Code

HFCP – 8625

SERIES TYPE
HFCP Manual

VALVE SIZES	PIPE/(BODY) INCH – SIZES – JIS	
8625	Ø8.625 PIPE ENDS	(8.625)
1086	Ø10.75 PIPE ENDS	(8.625)
JIS SIZES		
200A	Ø8.516 PIPE ENDS	(8.625)

- 32 - PC27 - FSM-MS - BK

SURFACE FINISH32 Ra Max - Std EPBA 64 Ra Max - Non EP

CODE TYPE
FSM-MS Male-RH

CODE	SIZE/LOCATION	TYPE
PC27	3/4" Up & Downstream	Purge
PV2755	3/4" Up & Downstream	Purge Valve

CODE	OPTIONS	
ŀ	Handwheel	
BL	Blue	
BK	Black–Standard	
BR	Brown	
DG	Dark Gold	
GL	Gold	
GR	Green	
GY	Grey	
OR	Orange	
PR	Purple	
PK	Pink	
RD	Red	
SL	Silver	
TL	Teal	
WT	White	
YL	Yellow	
	OPTIONS	
V	*Vespel® Seat	

*Vespel® is a registered trademark of DuPont Company.

Safe Product Selection

When selecting a product, the total system design must be considered to ensure safe, trouble-free performance. Function, material compatability, adequate ratings, proper installation, operation, and maintenance are the responsibilities of the system designer and user.

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Carten Controls is a member of Fujikin Corp Group (FCG) with Headquarters in Osaka, Japan.