



# SERIES AP 3900

## MANUAL SPRINGLESS 1/2" DIAPHRAGM VALVE

Pull>Twist, Lock Out / Tag Out (LOTO) Handle

- Handle must be pulled to turn open from closed
- Visual open/closed indication
- Lock out/tag out (LOTO) standard feature
- Stainless steel 316L VAR secondary remelt construction
- 10 µin. surface finish (7 and 5 µin. optional)
- Multiport and monoblock integrated components
- Vacuum to 250 psig (17 bar)
- Metal to metal seal to atmosphere
- Cleaned, assembled and packaged for high purity semiconductor applications

### Operating Parameters

Inlet pressure	vacuum to 250 psig (17 bar)
Outlet pressure	vacuum to inlet pressure
Proof pressure	500 psig (34 bar)
Burst pressure	1,000 psig (69 bar)

### Other Parameters

Inlet /outlet connectors	3/8, 1/2 or 3/4 inch face seal or tube weld
Flow coefficient (Cv)	2.8, X <sub>T</sub> = 1.0
Internal volume	0.76 in <sup>3</sup> (12.52 cm <sup>3</sup> )
Operating temperature	-40° to +160°F (-40° to +71°C)
Surface finish	10 µin. Ra max standard; 7 µin (0.18 µm); and 5 µin (0.13 µm) optional
Inboard leakage	2 x 10 <sup>-10</sup> sccs
Outboard leakage	2 x 10 <sup>-9</sup> sccs He at 125 psig
Leakage across seat	4 x 10 <sup>-8</sup> sccs He at 125 psig inlet pressure

### Materials

	Series AP 3900
Wetted Parts	
Body	stainless steel 316L secondary remelt
Finish	electropolished and passivated
Diaphragm	stainless steel 316L
Seat	PCTFE (Vespel® optional)

All specifications subject to change without notice

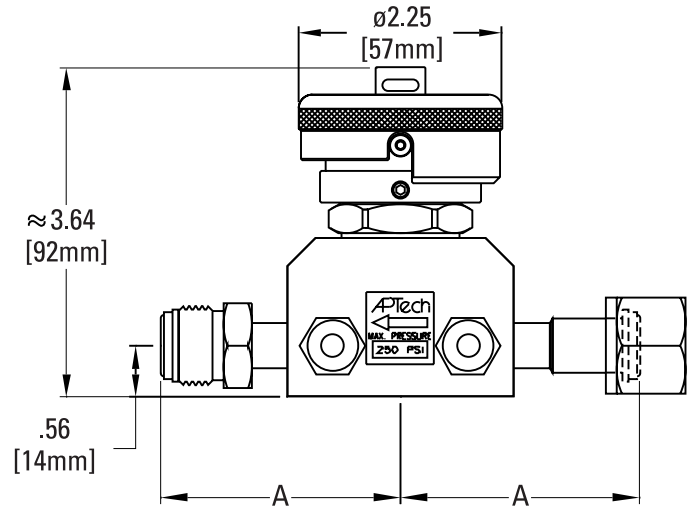
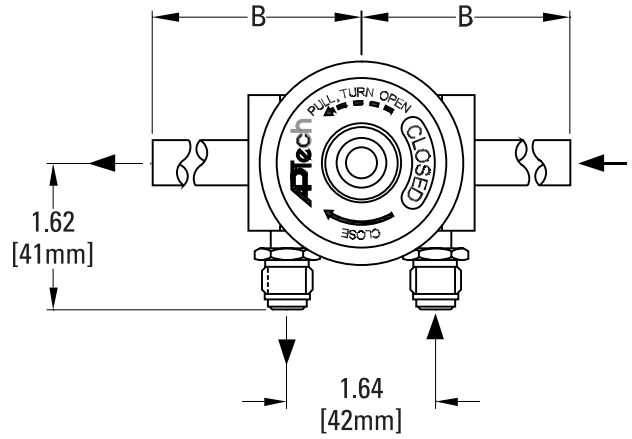
Vespel® DuPont

# THE ULTIMATE SAFETY SOLUTION

DIMENSIONAL INFORMATION

Connections	A		B	
	in [±.02]	mm*	in [±.02]	mm*
FV8, MV8	2.65	67	-	-
FV12, MV12	3.20	81	-	-
TW6, TW8, TW12	-	-	4.25	108

\*Dimensions in "mm" are for reference only.



Please refer to Technical Bulletin 204 for multiport and monoblock configurations.

PORTING CONFIGURATIONS

ORDERING INFORMATION

Sample Order Number

AP 3900SM TW8 TW8 0B VS

AP 3900 | Series

Please refer to Technical Bulletin 204 for multiport or monoblock configurations

S | Material

S = 316 L stainless steel

M | Surface Finish Options

M = 10 µin. Ra max  
V = 7 µin. Ra max  
X = 5 µin. Ra max

TW8 TW8 | Connections Inlet / Outlet

TW6 = 3/8 inch tube stub weld  
TW8 = 1/2 inch tube stub weld  
MV8 = 1/2 inch face seal male  
FV8 = 1/2 inch face seal female  
TW12 = 3/4 inch tube stub weld  
MV12 = 3/4 inch face seal male  
FV12 = 3/4 inch face seal female

0B | Purge Port Inlet / Outlet

M = Inlet purge port (main)  
B = Outlet purge port (branch)  
0 = No purge port

VS | Options

VS = Vespel Seat  
C = Capped Purge Port