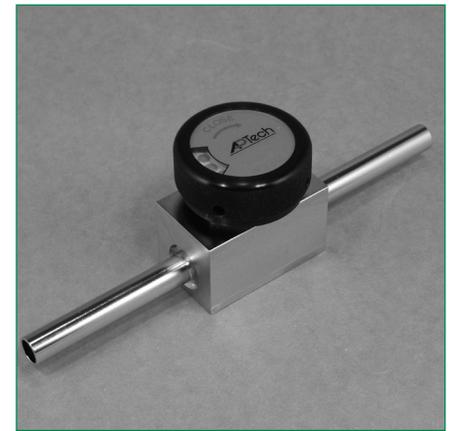


SERIES AZ 37, 38 & 39

1/2 INCH DIAPHRAGM VALVE

Springless – manual and pneumatic (NC & NO)



- 316L SS construction
- Operating pressure vacuum to 250 psig (17 bar)
- Machined from bar stock
- Lock out / tag out (LOTO) standard with AP 3900 manual valve
- Flow capacity 2.8 C_v
- Surface finish 10 μin. Ra
- Indicating switch option for pneumatic valves AP 3700 and AP 3708
- Installation and operating instructions available at www.aptech-online.com in the Tech Briefs section

Materials — wetted parts, all valves

Body	SS 316L
Finish	electropolished and passivated
Diaphragm	stainless steel 316L (Ni-Cr-Mo alloy optional)
Seat	PCTFE (Polyimide optional)

Manual valves

	PSIG / BAR 250 / 17
AZ 3800	●
– Round knob	
– Open/closed status indicating window	
AZ 3900	●
– Round knob	
– Open/closed status indicating window	
– Pull, then turn to open – operational or safety feature	
– Lock out/tag out (LOTO) – integral standard feature	

Pneumatic valve, normally closed (NC)

	PSIG / BAR 250 / 17
AZ 3700	●
– Switch option for remote monitoring	

Pneumatic valve, normally open (NO)

	PSIG / BAR 250 / 17
AZ 3708	●
– Switch option for remote monitoring	

Operating Parameters — all valves

Inlet pressure	vacuum to 250 psig (17 bar)
Outlet pressure	vacuum to inlet pressure
Proof pressure	150% of operating pressure
Burst pressure	300% of operating pressure

Other Parameters — all valves

Inlet /outlet connectors	3/8, 1/2 or 3/4 inch face seal or tube weld
Flow coefficient (Cv)	2.8, X _T = 1.0
Internal volume	0.76 in ³ (12.52 cm ³)
Operating temperature	-40° to +160°F (-40° to +71°C)*
Surface finish	10 μin. Ra avg (0.25 μm)
Inboard leakage	2 x 10 ⁻¹⁰ sccs
Outboard leakage	2 x 10 ⁻⁹ sccs He
Leakage across seat	1 x 10 ⁻⁹ sccs He

Operating Parameters — pneumatic valves

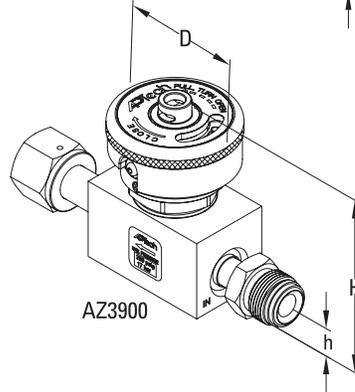
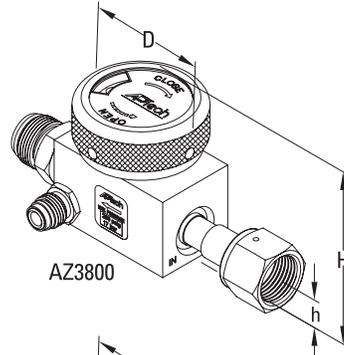
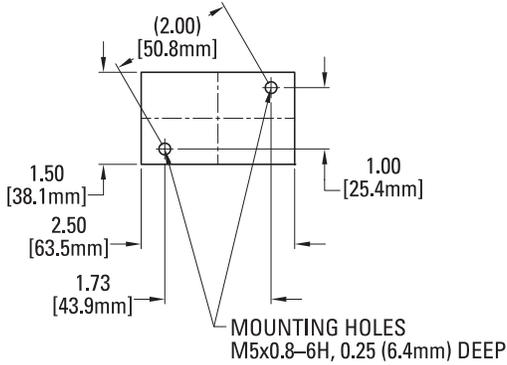
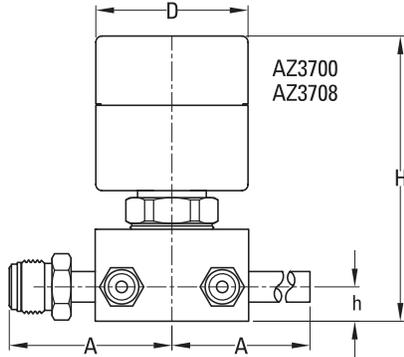
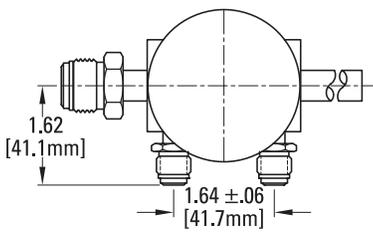
Status	AZ 3700	normally closed (NC)
	AZ 3708	normally open (NO)
Actuation port	M5, side port	
Actuation pressure	80 to 100 psig (5.5 to 7 bar)	

*VS option 14° to 194°F (-10° to + 90°C).

All specifications subject to change without notice.

ULTRACLEAN TECHNOLOGY BACKED BY SERVICE AND SUPPORT

DIMENSIONAL INFORMATION



- Metric dimensions are for reference only.
- All specifications subject to change without notice.
- AZ3800 valve is shown in open position.
- AZ3900 valve is shown in closed position.

CONNECTION	A	
	inch [±.02]	mm
FV8, MV8	2.65	67.3
TW6, TW8, TW12	4.25	108
FV12, MV12	3.20	81.3

VALVE	D		H		h	
	inch	mm	inch	mm	inch	mm
AZ3700	ø2.48	63.0	4.8	122	.56	14.2
AZ3708	ø2.48	63.0	4.2	107	.56	14.2
AZ3800	ø2.25	57.2	2.6	66	.56	14.2
AZ3900	ø2.25	57.2	3.4	86	.56	14.2

CAUTION: Product selection is the sole responsibility of the user, regardless of any recommendations or suggestions made by the factory. The user shall make selections based upon their own analysis and testing with regard to function, material compatibility and product ratings. Proper installation, operation and maintenance are also required to assure safe, trouble free performance.

ORDERING INFORMATION

Sample Order Number		AZ 3700SM TW8 TW8 0B C	
AZ 37 Series	AZ 37 = Air actuated AZ 38 = Manual AZ 39 = Manual, LOTO	TW8 TW8 Connections Inlet / Outlet (main / branch)	TW6 = 3/8 inch tube stub weld FV8 = 1/2 inch face seal female MV8 = 1/2 inch face seal male TW8 = 1/2 inch tube stub weld FV12 = 3/4 inch face seal female MV12 = 3/4 inch face seal male TW12 = 3/4 inch tube stub weld
Status (AZ37 only)	00 = Normally closed or manual valve 08 = Normally open	0B Purge Port Inlet / Outlet (main / branch)	M = Inlet purge port B = Outlet purge port 0 = No purge port
s Material	S = Stainless steel (SS)	c Options	VS = Polyimide Seat ISC = Indicator Switch, NC* (3700 & 3708 only) ISO = Indicator Switch, NO* (3700 & 3708 only) C = Capped Purge Port HD = Diaphragm Ni-Cr-Mo alloy

*Refer to operating manual for further switch information.

AP Tech has product options and variations which are not documented in data sheets. If you have a model number that is not defined by the ordering information, please consult the factory or your local representative.