



SERIES AP 72

VACUUM GENERATOR MODULE

Venturi — Shut off valve — Check valve

- Monoblock vacuum venturi, diaphragm valve and check valve
- Compact design
- Manual or pneumatic actuation options
- Constant bleed option 5, 8 and 15 slpm of N2 @ 80 psig (5.5 bar)
- 26 in. Hg (100 Torr) of vacuum generated with 80 psig (5.5 bar) and 60 slpm of Nitrogen
- Stainless steel 316 construction
- Metal to metal seals to atmosphere
- DI cleaned and baked dry

Operating Parameters

N2 inlet	70 to 110 psig (4.8 to 7.6 bar)
Vacuum port maximum pressure	3,000 psig (207 bar)
Vacuum*	26 inch Hg (100 Torr)
Check valve cracking pressure**	3 psid (0.2 bar) (differential)
Constant bleed (opt) CB009	2-5 slpm N2 @ 80 psig (5.5 bar)
(opt) CB013	5-8 slpm N2 @ 80 psig (5.5 bar)
(opt) CB023	10-15 slpm N2 @ 80 psig (5.5 bar)
Inboard leakage	2 x 10 ⁻¹⁰ sccs
Outboard leakage	2 x 10 ⁻⁹ sccs He at 250 psig inlet pressure
Leakage across seat	4 x 10 ⁻⁸ sccs He at 250 psig inlet pressure***
Proof pressure, applied to vacuum port	5,000 psig (345 bar)
Burst pressure, applied to vacuum port	10,000 psig (690 bar)

* Vacuum specifications are based on a 3/8" vent line of 30" overall length.

** Cracking pressure is a nominal value which may vary in specific applications.

*** 125 psig inlet pressure for AP 72540.

Other Parameters

Inlet port fitting	1/4 inch face seal male or female
Vent port fitting	1/4 inch, 3/8 inch face seal or 3/8 inch tube stub
Vacuum port fitting	1/4 inch face seal or tube weld

Other Parameters – AP 72540 and AP 72550

Valve status	Normally Closed (NC)
Actuation port AP 72540	1/8 inch NPT (TOP)
AP 72550	10-32 (SIDE)
Actuation pressure	70 to 110 psig (4.8 to 7.6 bar)
Pressure rating AP 72540	vacuum to 125 psig (9 bar)
AP 72550	vacuum to 250 psig (17 bar)

Materials and Actuation Options

Actuation Options (Valve type)		Materials	
		Wetted Parts	
72625	1/4 turn lever (3625)	Body	316L SS
72540	Pneumatic NC (3540)	Finish	electropolished and passivated
72550	Pneumatic NC (3550)	Diaphragm	Elgiloy®
72650	1/4 turn knob (3650)	Seat	PCTFE (Vespel® optional)
72600	Multi-turn knob (3600)	Check Valve Seal	Viton® (optional seal available)

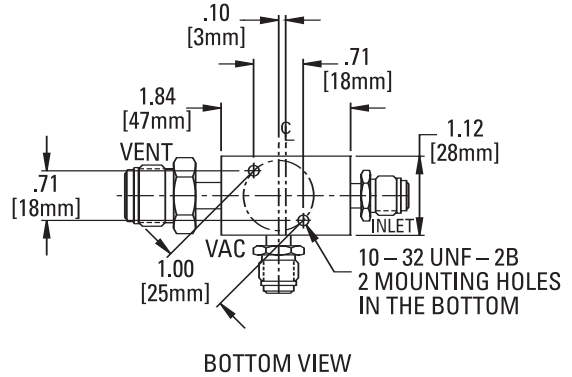
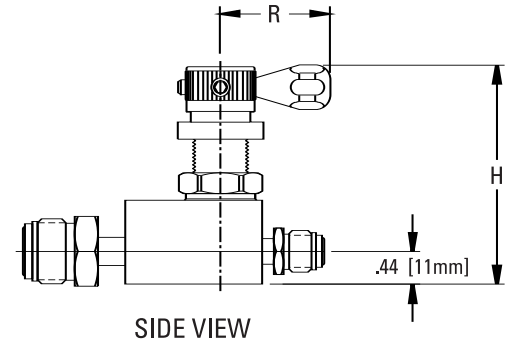
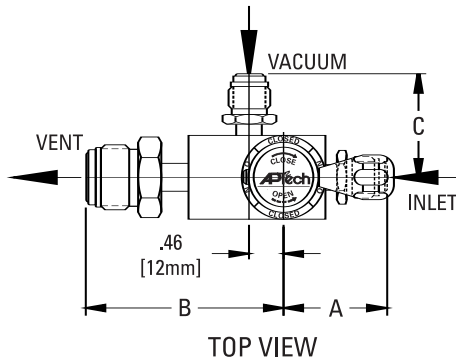
All specifications subject to change without notice.

Elgiloy® Elgiloy Corporation Vespel® DuPont Viton® DuPont

THE ULTIMATE VACUUM SOLUTION

DIMENSIONAL INFORMATION

Model	Actuator Radius, R		Height, H	
	in [±.01]	mm [±.3]	in [±.10]	mm [±.3.0]
AP72540	.73	18.5	3.49	88.6
AP72550	.69	17.4	3.28	83.3
AP72600	1.06	26.9	2.64	67.1
AP72625	1.48	37.6	2.94	74.7
AP72650	.94	23.9	3.02	76.7

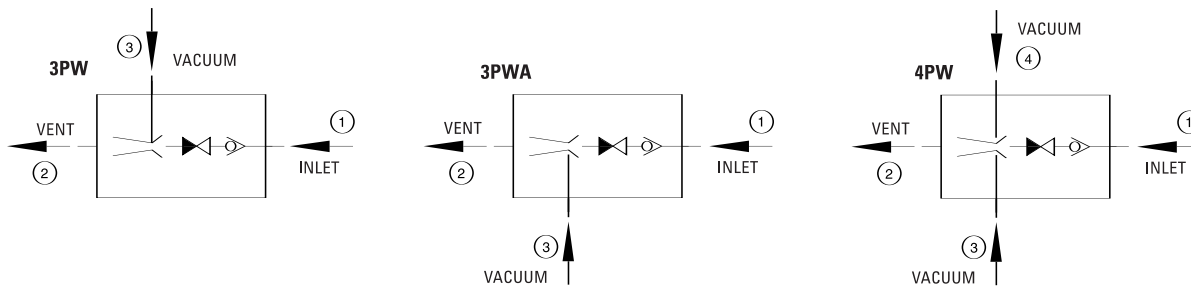


Connections	A		B		C	
	in [±.01]	mm [±.3]	in [±.01]	mm [±.3]	in [±.01]	mm [±.3]
MV4, FV4	1.39	35.3	2.11*	53.6*	1.39	35.3
TW4	-	-	-	-	1.06	26.9
FV6, MV6	-	-	2.65	67.4	-	-
TW6	-	-	2.05	52.0	-	-

* High flow 1/4" face seal fittings.

PORTING CONFIGURATIONS

AP72 SERIES PORTING GUIDE
TOP VIEW SHOWN



End connections are specified in numerical order per the diagram's numbered arrows.

All dimensions in inches (mm). Metric dimensions are for reference only.

ORDERING INFORMATION

Sample Order Number **AP 72625S 3PW MV4 FV6 TW4 CB009**

AP 72625 | Series

AP 72625 = 1/4 turn lever
 AP 72540 = Pneumatic NC
 AP 72550 = Pneumatic NC
 AP 72650 = 1/4 turn knob
 AP 72600 = Multi-turn knob

S | Material

S = Stainless steel (SS)

3PW | Porting

3PW = 3 Port
 3PWA = 3 Port
 4PW = 4 Port

Refer to porting configuration above for selection

MV4 | N2 Inlet

MV4 = 1/4 inch face seal male
 FV4 = 1/4 inch face seal female

FV6 | Vent

MV4 = 1/4 inch face seal male
 FV4 = 1/4 inch face seal female
 MV6 = 3/8 inch face seal male
 FV6 = 3/8 inch face seal female
 TW6 = 3/8 inch tube weld stub

TW4 | Vacuum

MV4 = 1/4 inch face seal male
 FV4 = 1/4 inch face seal female
 TW4 = 1/4 inch tube weld stub

CB009 | Options

CB009 = 5 slpm constant bleed
 CB013 = 8 slpm constant bleed
 CB023 = 15 slpm constant bleed
 VS = Vespel seat