



# SERIES AP 32

## METAL SEATED 1/4 INCH DIAPHRAGM VALVE

Pneumatically (NC) or manually actuated

- Vacuum to 508 psig (35 bar)
- Stainless steel 316L VAR secondary remelt
- All metal wetted parts for increased compatibility with  $ClF_3$  and  $F_2$
- Surface finish  
15 Ra max/10 Ra avg  
(10, 7 & 5 Ra max options)
- Pneumatically actuated NC (normally closed)
- Manually actuated, multi-turn and 1/4 turn
- All metal, no wetted plastic or polymer
- Indicating switch option (AP 3200 and 3202)
- Installation and operating instructions available at [www.aptech-online.com](http://www.aptech-online.com) in the Tech Briefs section

### Operating Parameters — all valves

Inlet pressure	vacuum to 125 psig (9 bar)
AP 3200, 3225, 3260	vacuum to 508 psig (35 bar)
AP 3202, 3262	
Outlet pressure	vacuum to inlet pressure
Proof pressure	150% of operating pressures
Burst pressure	300% of operating pressures

### Other Parameters — all valves

Inlet /outlet connectors	1/4 or 3/8 inch face seal or tube weld
Flow coefficient (Cv)	0.27, $X_T = 0.7$
Internal volume	0.06 in <sup>3</sup> (1.07 cm <sup>3</sup> )
Operating temperature	-40° to +212°F (-40° to +100°C)
Surface finish	15 µin Ra max / 10 µin. Ra avg. (0.4/0.25 µm) standard; 10 µin (0.25 µm); 7 µin (0.18 µm); and 5 µin (0.13 µm) Ra max optional Optional surface finishes meet or exceed 5 µin Ra average
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	1 x 10 <sup>-6</sup> sccs He at 125 psig inlet pressure

### Other Parameters – AP 3200

Actuation port	1/8 inch NPT, top port
Actuation pressure	70 – 110 psig (4.8 – 8.3 bar)
Status	Normally closed (NC)

**CAUTION:** Metal seated valves are more prone to across the seat leaks than soft seated valves.

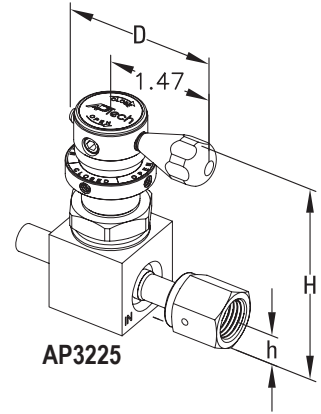
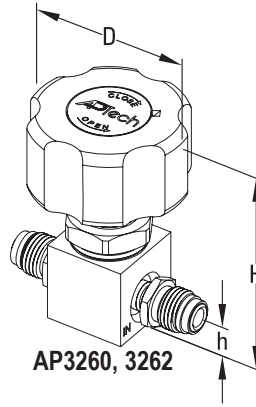
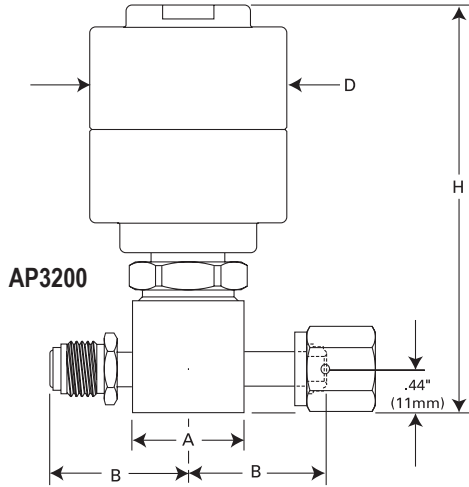
### Materials

	<b>Series AP 32 S</b>
Wetted Parts	
Body	SS 316L secondary remelt
Finish	electropolished and passivated
Diaphragm	Ni-Co alloy / UNS R30003

All specifications subject to change without notice

# UNCOMPROMISING QUALITY, PERFORMANCE AND RELIABILITY

## DIMENSIONAL INFORMATION

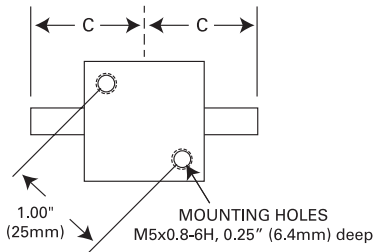


MATERIAL	Connection	A		B		C	
		in.	mm	in. [±.01]	mm	in. [±.01]	mm
S	FV4, MV4	1.12 sq.	28	1.39	35	–	–
	TW4	1.12 sq.	28	–	–	1.06	27
	FV6, MV6	1.12 sq.	28	1.93	49	–	–
	TW6	1.12 sq.	28	–	–	1.325	34

VALVE	D		H	
	inch	mm	inch	mm
AP3200	ø1.98	50.3	4.10	104
AP3202	ø1.98	50.3	4.10	104
AP3260	ø2.12	53.8	3.00	76
AP3262	ø2.12	53.8	3.00	76
AP3225	2.04	51.8	2.94	75

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

## PORTING CONFIGURATIONS



Please refer to Series AP 30, 35 & 36 or Series AP 45 & 46 data sheets for porting configuration options.

**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

AP 3200SM 2PW MV4 MV4

AP 3200 | Series

AP 3200 = Pneumatic, NC  
 AP 3202 = Pneumatic, NC  
 AP 3260 = Manual, multi-turn  
 AP 3262 = Manual, multi-turn  
 AP 3225 = Manual, 1/4 turn lever

MV4 MV4 | Connections  
 Inlet / Outlet

MV4 = 1/4 inch face seal male  
 FV4 = 1/4 inch face seal female  
 TW4 = 1/4 inch tube stub weld  
 (3/8 connectors optional)

S | Material

S = Stainless steel (SS)

Options

1.75 = 1.75 inch face to face TW4  
 P = Panel Mount (AP 3225, 3260, 3262 only)\*  
 IS = Indicator Switch (AP 3200, 3202 only)\*\*  
 SC = Short bonnet

M | Surface  
 Finish  
 Options

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

2PW | Ports

2PW = 2 ports butt weld  
 3PW = 3 ports butt weld  
 4PW = 4 ports butt weld

Refer to Series AP 30, 35 & 36 or  
 Series AP 45 & 46 data sheets  
 for selection.

\*Panel hole 0.78 inch diameter  
 \*\*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.