

# SERIES AP 3672, 3675 & 4675

1/4 & 3/8 INCH METERING VALVES Ultraclean Springless Diaphragm Design



- Fine adjustment control
   12 to 15 turns of the knob
   to wide open
- Positive shut off (AP 3672 and AP 3675 only)
- Metal seal to atmosphere
- Operating pressure to 145 psig (10 bar)
- Surface finish
   15 Ra max/10 Ra
   (10, 7 & 5 Ra max options)
- One wetted moving part

   a diaphragm
- Multi-port options available
- Stainless steel 316L VAR construction
- AP 3672 flow to 10 slpm, AP 3675 flow to 40 slpm, & AP 4675 flow to 70 slpm at 30 psig (2 bar) N2
- Installation and operating instructions available at www.aptech-online.com

### **Pressure Ratings**

Operating pressure	vacuum to 145 psig (10 bar)
Proof pressure	150% of operating pressure
Burst pressure	300% of operating pressure

#### **Other Parameters**

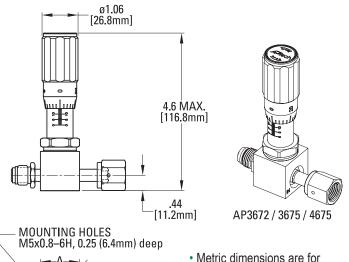
Inlet/outlet connectors		1/4 or 3/8 inch face seal or tube weld,	
		FA 1.125 inch C seal (AP 3672 & AP 3675 only)	
Flow apofficient (Cv) AD 2672		0 to 0.02	
Flow coefficient (Cv)	AP 3672		
	AP 3675	0 to 0.08	
	AP 4675	0 to 0.15	
Internal volume		0.06 in <sup>3</sup> (1.07 cm <sup>3</sup> )	
Operating temperature		-40° to +160°F (-40° to +71°C)	
Surface finish		15 μin. Ra max/10 μin. Ra (0.4/0.25 μm) standard	
		10 μin (0.25 μm) and 7 μin (0.18 μm) Ra max optional	
		Optional surface finishes meet or exceed 5µin Ra average	
Inboard leakage		2 x 10 <sup>-10</sup> sccs	
Outboard leakage		2 x 10-9 sccs	
Leakage across seat		bubble tight (AP 3672 & AP 3675 only)	

#### **Materials**

	Series AP 3672 and 3675	Series AP 4675
Wetted Parts		
Body	SS 316L secondary remelt	SS 316L secondary remelt
Diaphragm	Co-Ni-Cr alloy / UNS R30003	Co-Ni-Cr alloy / UNS R30003
Finish	electropolished and passivated	electropolished and passivated
Seat	PCTFE	SS 316L

All specifications subject to change without notice.

## THE ULTIMATE IN ULTRACLEAN FLOW METERING



- M5x0.8–6H, 0.25 (6.4mm) deep
- Metric dimensions are for reference only.
- All specifications subject to change without notice.
- Valves are shown in open position.

AP3675 (HF) AVG FLOW (SLPM) & Cv vs TURNS	0.08
	0.07
	0.06
\( \hat{\text{2}} \frac{30}{\text{2}} \)	0.05
NO 30 NO NO 30 NO	خ 0.04
§ 15	0.03
<sup>11</sup> 10	0.02
5	0.01
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 TURNS	0
AP3672 (LF) AVG FLOW (SLPM) & Cv vsTURNS	<del>-</del> 0.03
10	
12	0.025
€ 10	0.02
FLOW (SLPM)	<sub>0.015</sub>
3 °	0.01
	0.005
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 TURNS	160
AP4675 AVG FLOW (SLPM) & Cv vsTURNS	_
70	0.16
60	0.14

AP4675 AVG FLOW (SLPM) & Cv vsTURNS	_	
_	0.16	
	0.14	
	0 12	
		S
		0
	0.06	
	0.04	
	0.02	
	0	
		0.16 0.14 0.12 0.10 0.08 0.06 0.04 0.02 0.02

CONNECTION	Α		В		
CONNECTION	inch	mm	inch	mm	
FV4, MV4	1.12 SQ	28.4	1.390	35.3	
TW4	1.12 SQ	28.4	1.060	26.9	
FV6, MV6	1.12 SQ	28.4	1.930	49.0	
TW6	1.12 SQ	28.4	1.325	33.7	

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

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.

Sample Order Number	AP 3672SM 2PW FV4 FV4		
AP 3672   Series	AP 3672 AP 3675 AP 4675	FV4 FV4   Connections Inlet / Outlet or	FV4 = 1/4 inch face seal female MV4 = 1/4 inch face seal male TW4 = 1/4 inch tube stub weld
S   Material	S = Stainless steel (SS)	①②③④	FV6 = 3/8 inch face seal female MV6 = 3/8 inch face seal male TW6 = 3/8 inch tube stub weld
		Options	1.75 = 1.75 inch face to face TW4, TW6
M   Surface Finish Options	$M = 10 \mu in$ . Ra max $V = 7 \mu in$ . Ra max $X = 5 \mu in$ . Ra max	, cpacie	FA = 1.125 inch C seal (AP 3672 & AP 3675 only)
2PW Ports	2PW = 2 ports welded 3PW = 3 ports welded 4PW = 4 ports welded		
Porting Designation Option	<ul> <li>X = Letter code for available porting option</li> <li>Refer to porting options in AP30 data sheet.</li> </ul>		

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.