

AVMP - VARIABLE AREA DIRECT FLOW METER MEDIUM/LARGE

The AVMP series flowmeters are variable area flowmeters suitable for medium and large flows of liquid and gaseous fluids. The flow rate measurement can be read with great precision and easily on the graduated scale, screen-printed on the conical tube polysulphone. The reading is related to the condition of dynamic balance of the float, with pressure drop due to the throttling constant and content over the whole range of the values indicated.

The variable area meters can be installed at any point of the pipeline without need of straight sections or correctors flow. Easy maintenance.

A switch is available on request as a min / max range.



TECHNICAL FEATURES

Measuring tube:	Polysulphone - Polipropylene
Floating:	AISI316, PVC, PTFE, Titanium, Monel, Hastelloy
Fittings:	threads or flanged AISI304, 316, carbon steel, PVC
Gaskets seal:	acid-resistant rubber, Viton, PTFE
Accuracy:	+/- 3%
Test pressure max:	8 bar

Size	Air flow Nm ³ /h Pa	Threaded connections as F	Length mm.		Flanged connections DN	Lenght mm.	
			Metal	PVC		Metal	PVC
3	6	1/2"-3/4"-1"	372	420	15-20-25	504	528
	8						
	10						
3b	20	3/4"-1"	372	420	20-25	504	528
4	40	3/4"-1"	380	428	20-25	508	532
5b	60	1"1/4"-1"1/2"	380	428	32-40	508	562
K1	80	1"1/4"-1"1/2"	485	533	32-40	613	687
K2	130	1"1/2"-2"	481	557	40-50	615	679
K3	250	2"-2"1/2"-3"	485	569	50-65-80	625	679



SATEMA

13856 VIGLIANO B.SE - Via Milano, 395

Tel. +39 015811102 - Fax 0158853029

Mail: info@satema.it <http://www.satema.it>

AVRP - VARIABLE AREA DIRECT FLOW METER MEDIUM

The AVRP series flowmeters are made entirely of Plexiglas with tapered bore of the calibrated and polished proceeds directly into the structure. The guided or free float is made of different materials: AISI 316, Hastelloj, PVC, PTFE, Moplen, etc. Are provided, on request, with axial or team, flanged or threaded. The instrument accuracy is $\pm 3\%$ fs. The test pressure is 10 bar. A request can be made to PN 16, PN 25, PN 40.



Model	Q Nm3/h AIR A.P.	Threaded connections gas F		Flanged connections DN	
		DN	A - B - C mm.	DN	A - B - C mm.
AVRP-R1	6 8 10	1/2"	127 - 35 - 35	15	127 - 60 - 35
AVRP-R2	15 25	1/2" 3/4" 1"	160 - 40 - 40	15 - 20 - 25	160 - 80 - 40
AVRP-R3	40	1"	190 - 40 - 40	25	190 - 80 - 45
AVRP-R4	60 100	1"1/4 1"1/2 2"	190 - 40 - 40	40	190 - 80 - 60
AVRP-PL1	6 8 10	1/2"	180 - 35 - 35	15	180 - 60 - 35
AVRP-PL2	15 25	1/2" 3/4" 1"	220 - 40 - 40	15 20 25	220 - 80 - 40
AVRP-PL3	40	1"	260 - 40 - 45	25	260 - 80 - 45
AVRP-PL4	60	1"1/2	260 - 40 - 60	40	260 - 80 - 60
AVRP-PL5	100	1"1/2 2" 2"1/2	260 - 40 - 75	40 50 65	260 - 80 - 75



SATEMA

13856 VIGLIANO B.SE - Via Milano, 395

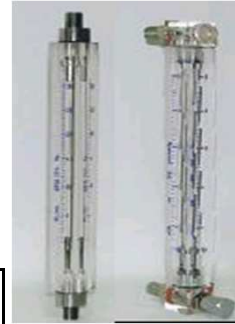
Tel. +39 015811102 - Fax 0158853029

Mail: info@satema.it <http://www.satema.it>

AVLAB - FLOW LABORATORY

The AVLAB series flowmeters are suitable for measuring instantaneous small flow of liquid or gaseous media. They may have with axial threaded or flanged and threaded team only, with or without needle valve needle. Entirely made of Plexiglas.

- Execution 1: with nickel-plated brass valve needle
- Execution 2: PVC or Stainless steel threaded fitting
- Execution 3: PVC flanged



Model	Q Nliters/min AIR	Threaded connections	Flanged connections	B	C	L
AVLAB	10	3/8" 1/2"	DN10 DN15	35	35	370
	20					
	30					
	50			40	40	380
	70					
	6 Nmc/h					
	8 Nmc/h					
10 Nmc/h						

AVANS - CLINICAL AREA VARIABLE FLOW METER

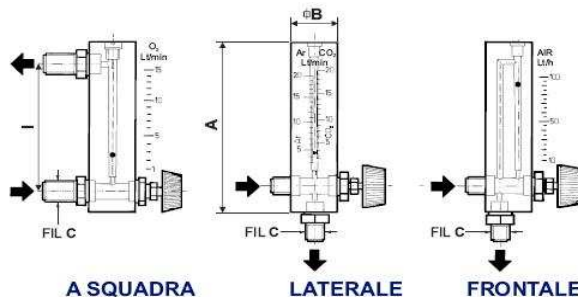
The flowmeters AVANS are made specifically for groups of anesthesia. Made from an aluminum anodized and control valves of the gas in nickel plated brass. The measuring tubes are conical borosilicate glass and graded for different anesthetic gases (O₂, N₂O, Air). They can be made on request with multiple gauges mounted in the same enclosure.

Contact the Sales Office SATEMA

AVAM - AREA VARIABLE SMALL FLOW METERS

The AVAM series flowmeters are suitable for measuring small fluid flow. The structure is made of acrylic material with tapered bore measurement obtained directly in the meter body. The float is usually spherical in AISI 316, according to the fluid in the process, can be nylon, glass, aluminum and other materials. The flowmeter is equipped with needle valve for regulating and dosing the fluid to the desired value. It is made with either back, side or front. Particularly useful is manifested in the use gasoterapia, purges, analysis and level measurement.

Dimensions	Attacks team - lateral or frontal				
length A	95	105	120	145	185
width B	30	30	30	30	30
thread C	1/4" - 3/8"				
Distance I	65	75	90	115	155
Q max NI/min	15	30	35	50	80



SATEMA

13856 VIGLIANO B.SE - Via Milano, 395
 Tel. +39 015811102 - Fax 0158853029
 Mail: info@satema.it <http://www.satema.it>

CONVERSION TABLE FOR BACKPRESSURE CHANGE

Pressure bar (FC1)	FC2	Pressure bar (FC1)	FC2	Pressure bar (FC1)	FC2	Pressure bar (FC1)	FC2
0,001	1,0004	1,000	1,414	4,000	2,236	11,000	3,464
0,002	1,0009	1,100	1,449	4,100	2,258	12,000	3,605
0,003	1,0014	1,200	1,483	4,200	2,280	13,000	3,741
0,004	1,0019	1,300	1,516	4,300	2,302	14,000	3,873
0,005	1,0024	1,400	1,549	4,400	2,323	15,000	4,000
0,006	1,0029	1,500	1,581	4,500	2,345	16,000	4,123
0,007	1,0034	1,600	1,612	4,600	2,366	17,000	4,242
0,008	1,0039	1,700	1,643	4,700	2,387	18,000	4,358
0,009	1,0044	1,800	1,673	4,800	2,408	19,000	4,472
0,010	1,004	1,900	1,702	4,900	2,428	20,000	4,582
0,020	1,009	2,000	1,732	5,000	2,449	21,000	4,690
0,030	1,014	2,100	1,760	5,100	2,469	22,000	4,795
0,040	1,019	2,200	1,788	5,200	2,489	23,000	4,898
0,050	1,024	2,300	1,816	5,300	2,509	24,000	5,000
0,060	1,029	2,400	1,843	5,400	2,529	25,000	5,099
0,070	1,034	2,500	1,870	5,500	2,549	26,000	5,196
0,080	1,039	2,600	1,897	5,600	2,569	27,000	5,291
0,090	1,044	2,700	1,923	5,700	2,588	28,000	5,385
0,100	1,048	2,800	1,949	5,800	2,607	29,000	5,477
0,200	1,095	2,900	1,974	5,900	2,626	30,000	5,567
0,300	1,140	3,000	2,000	6,000	2,645	40,000	6,403
0,400	1,183	3,100	2,024	6,100	2,664	50,000	7,141
0,500	1,224	3,200	2,049	6,500	2,738	60,000	7,810
0,600	1,264	3,300	2,073	7,000	2,828	70,000	8,366
0,700	1,303	3,400	2,097	8,000	3,000	80,000	9,000
0,800	1,341	3,500	2,121	9,000	3,162	90,000	9,539
0,900	1,387	3,600	2,144	10,000	3,316	100,000	10,049
		3,700	2,167				
		3,800	2,200				
		3,900	2,213				

To know the variation of flow, with the flow meter calibrated for a pressure Atmospheric Pressure (A.P.), perform the following formula:

Q2 (actual flow rate at the desired pressure) NI, Nmc

Q1 (reading flowrate with calibration pressure (e.g. A.P.))

FC1 = working pressure

FC2 = conversion factor

$$Q2 = \frac{Q1 * FC2}{FC1}$$

e.g. * = $\frac{100 * 1,414}{1,000} = 141,4 \text{ mc/h at 1 bar}$

* direct reading on flometer scale 100 Nm³/h
 working pressure at 1 bar
 flowmeter calibrated A.P.



SATEMA

13856 VIGLIANO B.SE - Via Milano, 395

Tel. +39 015811102 - Fax 0158853029

Mail: info@satema.it

<http://www.satema.it>