



PETROCHEM SPECIFICATION AIR VALVES Series: PAV

Designed specifically for the petrochemical / offshore market, the Avarus PAV series air valves can be made in various highly corrosion resistant materials that are durable in these associated severe environments and applications. Extensive material testing and certification can also be supplied to individual project or client requirements.

If delivery time is an issue, please contact us. We can offer a reduced delivery time in order to meet customer needs.

Valve Functions

The Avarus Valves model **PAV10** air release valve has 1 function – see *Data Sheet PAV10*.

Function 1: The small orifice will automatically release any accumulation of air from the pressurised system.

The Avarus Valves model **PAV20** bi-function air valve has 2 functions.

Function 1: The large orifice will vent large volumes of air from the system when it is being filled.

Function 2: The large orifice will allow large volumes of air to re-enter the system when being emptied.

The Avarus Valves model **PAV30** tri-function air valve has 3 functions.

Function 1: The large orifice will vent large volumes of air from the system when it is being filled.

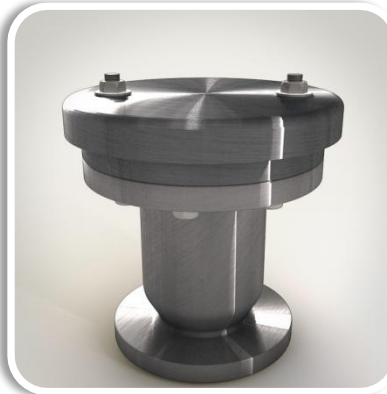
Function 2: The large orifice will allow large volumes of air to re-enter the system when being emptied.

Function 3: When function 1 is completed, the small orifice will automatically release any accumulation of air from the pressurised system.

Application

Suitable for sea water or corrosive fluid, working pressure 0.4 to 20 bar. Higher pressure rated valves are available.

Operating temperature -10 to +80°C, insulate at sub-zero temperatures.



Materials of construction available are;

Super Duplex, Titanium, Duplex, Stainless Steel, 6Mo Hastelloy®, Monel®,
Vistar®, Inconel®, Aluminium Bronze and Gunmetal.

Material testing is available to NORSOK MDS, individual Company or Project requirements.

Valve Configurator

Valve Series:

Petrochem Air Valve, **PAVIO**

Petrochem Air Valve, **PAV20** or **PAV30**

Size (mm):

015, 020, 025, 040 or 050 screwed or flanged

025, 050, 080, 100 or 150

Example: **PAV20-050-11111 =**

50mm (2") petrochemical specification bi-function air valve, Ansi 150#, aluminium bronze construction, aluminium bronze fasteners, nitrile seal, outlet shield.

Connection	Material	Fasteners	Seal	Outlet
1. Ansi 150	1. Aluminium Bronze	1. Aluminium Bronze	1. Nitrile	1. Shield (standard)
2. Ansi 300	2. Gunmetal	2. Galvanised Steel	2. Viton	2. Flanged
3. Ansi 600	3. Super Duplex	3. Super Duplex	3. -	3. Throttle Device
4. PN10	4. Duplex	4. Duplex	4. -	4. Surge Arrestor
5. PN16	5. Stainless Steel	5. Stainless Steel	5. -	5. Inflow Check
6. PN25	6. Titanium	6. Titanium	6. -	6. Outflow Check
7. PN40	7. 6Mo	7. 6Mo	7. -	7. Vented Non-Return
8. NPT thrd	8. Hastelloy	8. Hastelloy	8. -	8. Threaded
9. BSP thrd	9. Monel	9. H.T Steel	9. -	9. -
0. Other	0. Other	0. Other	0. Other	0. Other

Please consult **Avarus Valves Limited** for a detailed data sheet or if we can be of any assistance.

Dimensions

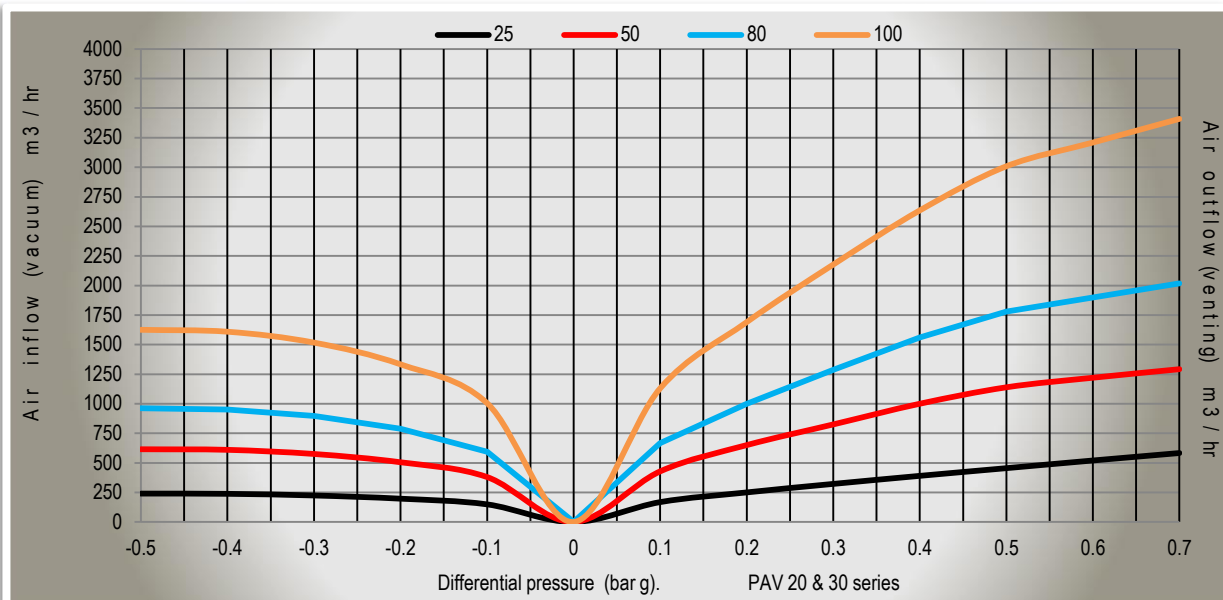
The dimensions in the table below are for our standard **PAV20** & **PAV30** air valves fitted with an outlet shield.

Valve size (mm) flanged inlet	DN25	DN50	DN80	DN100	DN150
Width (mm o.d.)	225	225	245	245	Please Consult us
Height (mm)	237	237	248	248	
Weight (kg)	15	18	23	25	

Sizing

PAV20 & **PAV30** air valves should be sized according to the pipeline or riser diameter. If air flow figures are available, then the below flow graph can be used. For fast start-up pump applications, please consult us, as an adjustable throttle device or surge arrestor can be fitted to the air valve to enable controlled venting.

Valve size	DN25	DN50	DN80	DN100	DN150
Recommended maximum pipeline diameter (mm)	250	400	450	600	Please consult us



Global Designation

Air valves types can have a different designation throughout the world, for example;
 Tri-function air valve can be known as – double orifice, combination, triple function, air release/vacuum.
 Bi-function air valve can be known as – single large orifice, double function, air vent/vacuum valve.
 Air release valve can be known as – single small orifice, air purge, air bleed, automatic release.