

The air relief valve is an automatic air relief/vacuum valve with an integrated double orifice valve

Operation

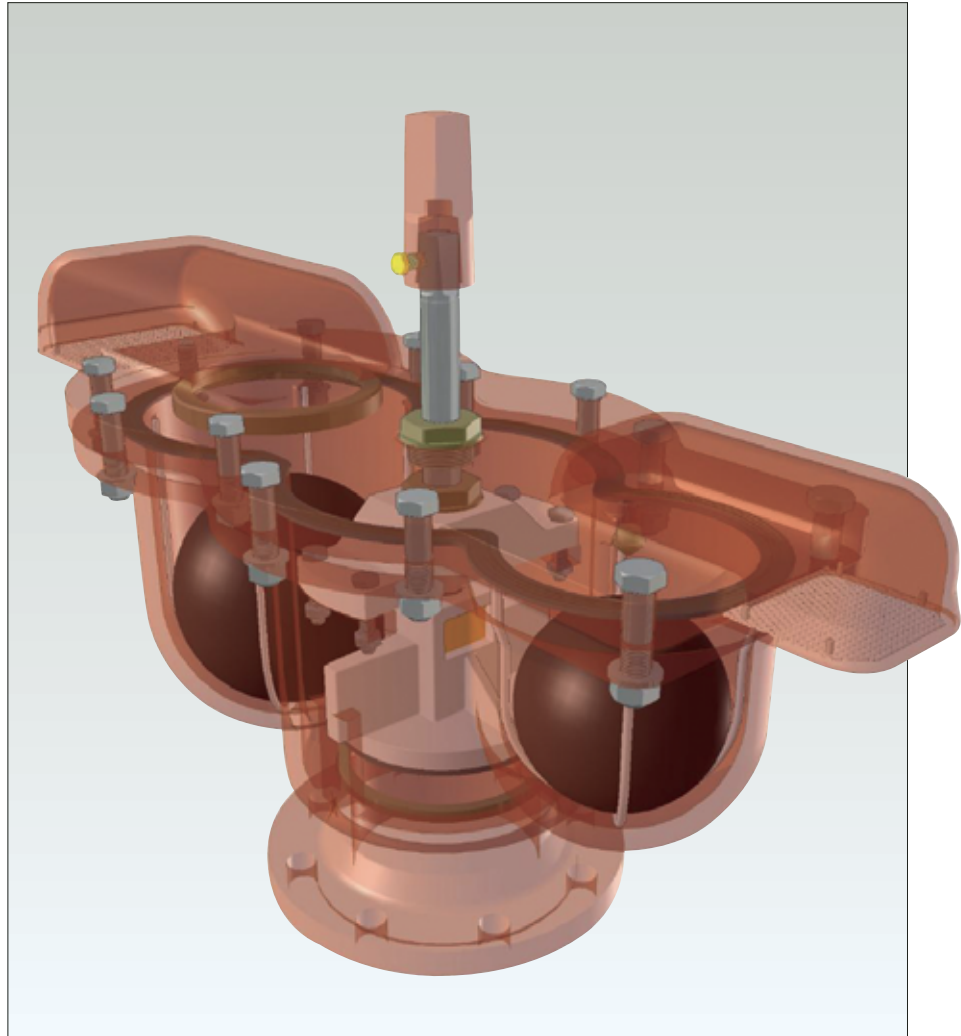
- Release air from pipeline during filling the system and release air pockets in the flow,
- Prevent vacuum, by adding air when a pipeline is emptied,
- Constantly protect the pipeline from air traps under pressure,
- Can be isolated by additional integrated valve or by built-under gate- or butterfly valve.

Features

- Double orifice
Large and small volumes of air are released or added during filling and emptying
- Integrated isolating valve or additional isolation valve available
- Positive shut-off at $\Delta p = 0.1$ bar
- Hold with outlet opening downward, protected by a screen arrangement to prevent ingress of dust (desert application)
- Reliable and proven design
- Various coatings and materials possible

Available

1. Double air valve (AV)
2. Double air valve with integrated valve (AVV)
3. Double air valve with added gate valve (AVGV)
4. Double air valve with added butterfly valve (AVBV)



General application

Water distribution

The air valve offers an excellent solution for releasing and adding air to water pipelines, protecting line systems, improving efficiency and solving air related surge problems.

Technical data

Pressure (bar)	16 (25)
Temperature (°C)	-20 to +80 *
Sizes (mm)	50 - 200
Flange accommodation	ISO 2531, BS 10E (other flange drillings on request)

* Depending on medium

Air Relief Valves

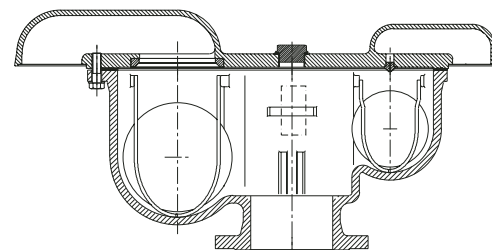
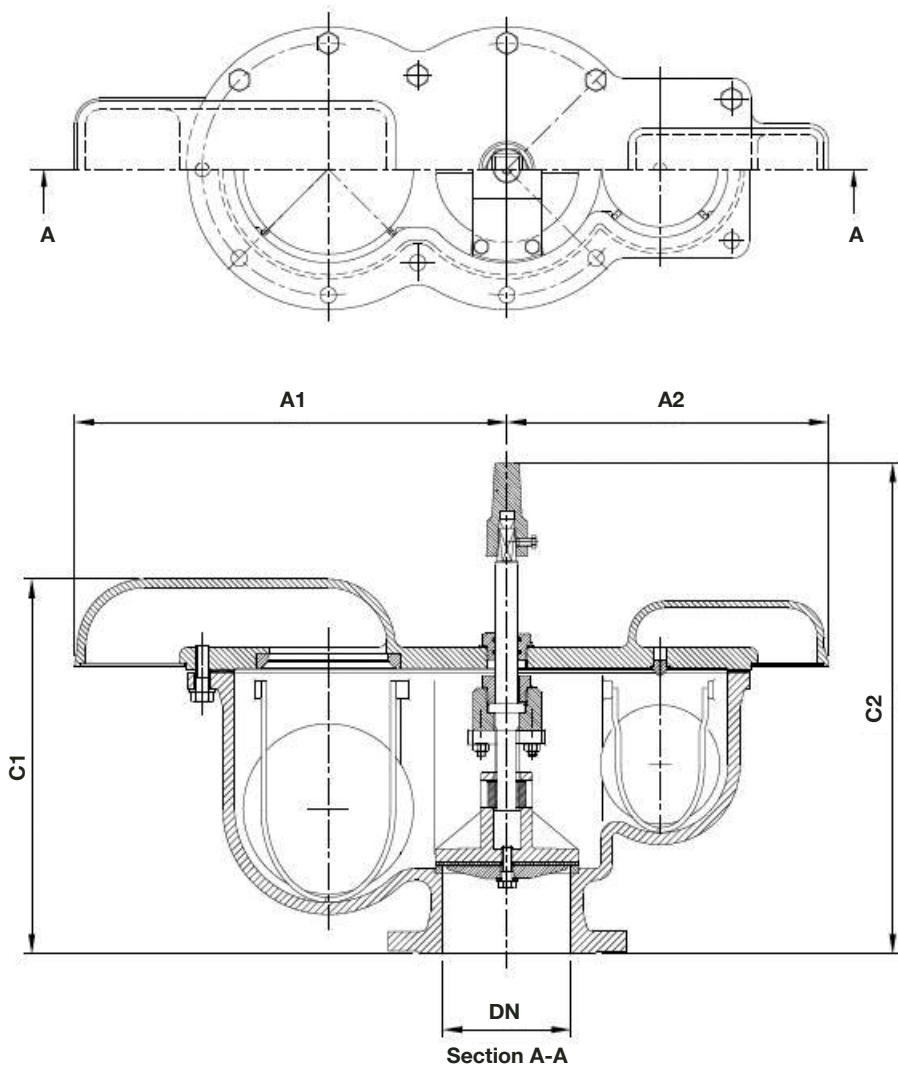
DN50 - DN200

Function

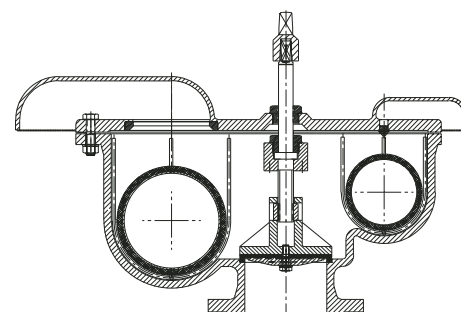
The valve consists of an integrated design of a large and a small orifice valve. The large valve releases or adds large volumes of air from the pipeline; the small valve will release or adds small volumes or bubbles from the pipeline.

With the integrated isolating valve, the air valve can be blocked off to do maintenance on-site.

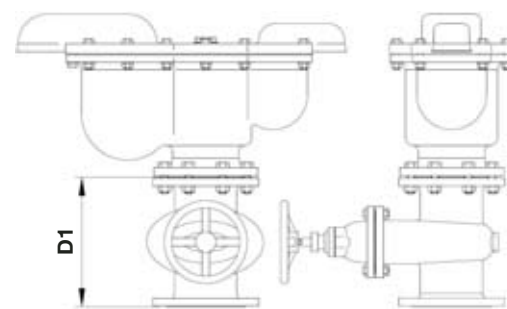
With the additional gate- or butterfly valve closed, on-site or workshop maintenance can be done.



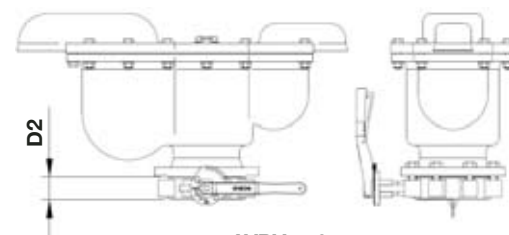
AV150



AVV150



AVGV 150



AVBV 150

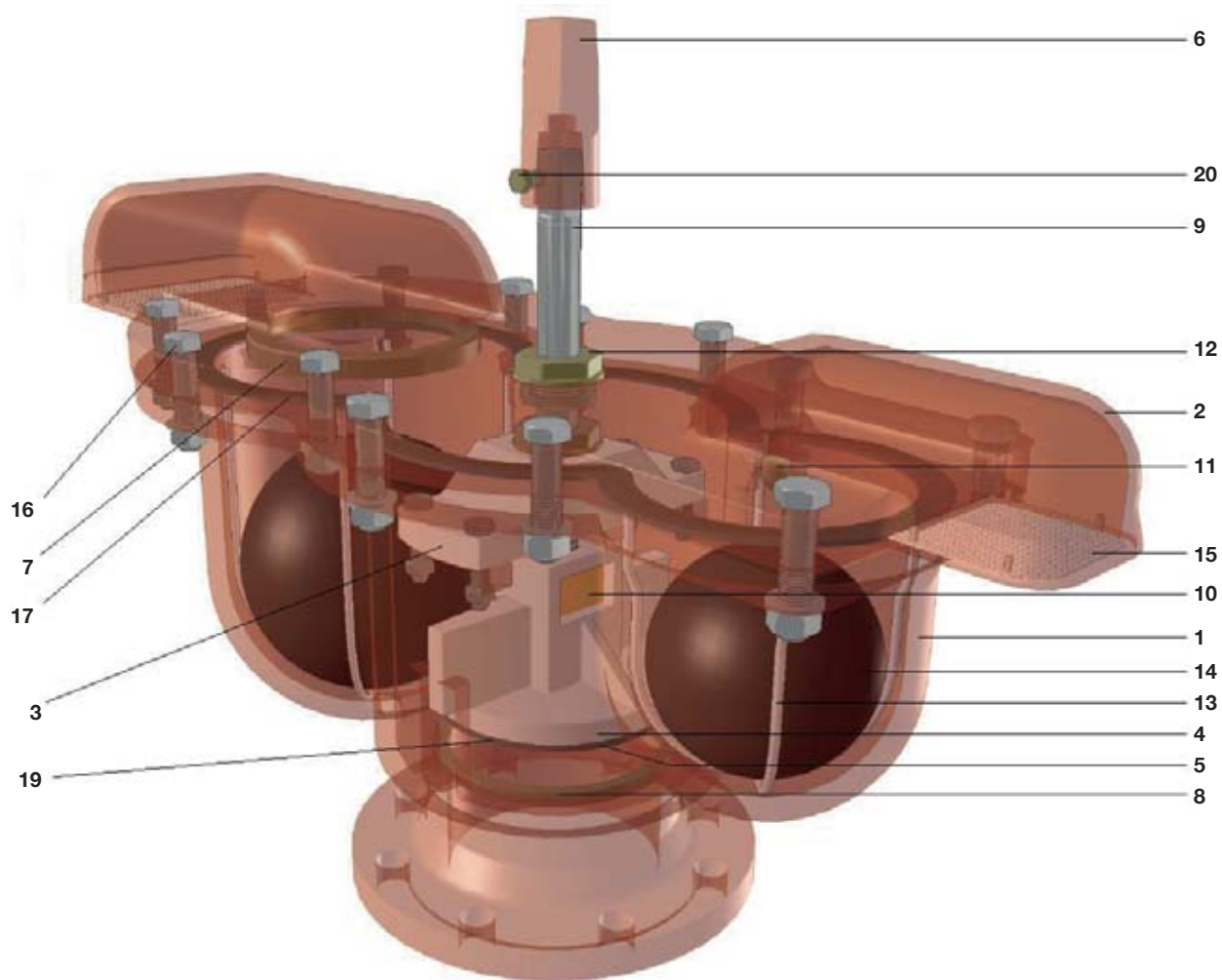
Figure 1
Drawn is AVV 150. Flange drilling according ISO 2531 or BS 10E. Other drillings on request.

Valve dimensions (in mm)

Size (DN)	A1	A2	B	C1	C2	D1	D2	Mass (kg)
AV 50	288	328	202	303	-	150/250*	43	46
AV 80	376	348	214	341	-	180/280*	46	65
AV 100	376	348	214	341	-	190/300*	52	65
AV 150	508	378	334	440	-	210/350*	56	90
AV 200	684	433	416	578	-	230/400**	60	170
AVV 50	288	328	202	303	426	-	-	52
AVV 80	376	348	214	341	449	-	-	70
AVV 100	376	348	214	341	449	-	-	72
AVV 150	508	378	334	440	577	-	-	100
AVV 200	684	433	416	578	729	-	-	180

* PN10 / PN16, 25

** PN6 / PN16, 25



Material specification AV/AVV

Pos	Part name	Material	Standard
1	Body	Ductile Iron	BS 2789-gr.500/7
2	Cover	Ductile Iron	BS 2789-gr.500/7
3	Spindle support	Ductile Iron	BS 2789-gr.500/7
4	Valve	Ductile Iron	BS 2789-gr.500/7
5	Retainer plate	Gunmetal	BS 1400-LG2
6	Key cap	Ductile Iron	BS 2789-gr.500/7
7	Seat ring	Gunmetal	BS 1400-LG2
8	Seat ring	Gunmetal	BS 1400-LG2
9	Spindle	Aluminium bronze	BS 2874-CA104
10	Nut	Gunmetal	BS 1400-LG2
11	Nipple	Gunmetal	BS 1400-LG2
12	Sealing piece	Gunmetal	BS 1400-LG2
13	Float guide	Stainless Steel	A276 gr.316
14	Float	Vulcanized rubber	
15	Riddle plate	Stainless Steel	A276 gr.316
16	Bolt	Mild galvanized steel	
17	Gasket	Nitrile rubber	NBR
19	Valve seat	Nitrile rubber	NBR
20	Bolt	Gunmetal	BS 1400-LG2