

Omega™ Double Effect Air Vent Super Steel Series

Designed to protect pipelines from air lock and vacuum collapse, the Omega™ Series Combination Air Release and Vacuum Breaker Valve eliminates air and prevents vacuum formations in pipelines. A large venting orifice and large float clearances freely exhaust or admits air during pipeline filling or draining. Omega is the most effective solution to maintain pipeline efficiency and protection from adverse pressure conditions.

Omega™ provides 3 functions in once:

1. Large air release during filling of the pipeline
2. Small air release under pressurized pipeline
3. Large air intake during draining of the pipeline

Features:

- A) **Charge and discharge** air capacity in model
- B) **Maintenance** can be easily performed from the top without removing the air valve from the pipeline
- C) **Simple**, Effective, Patented Design.
- D) **Standard** body made in high quality SS316L CF3M Stainless Steel
- E) **Standard** Trim and float made in SS316L CF3M Stainless Steel.
- F) **Standard** Viton Seat and O'Ring for highly corrosive fluids
- G) **Advanced** design with simple mechanism.
- H) **Better venting** and suction capacity than two holes air vent.
- I) **Suitable** for most common corrosive fluids: sea water and corrosive chemical fluids.

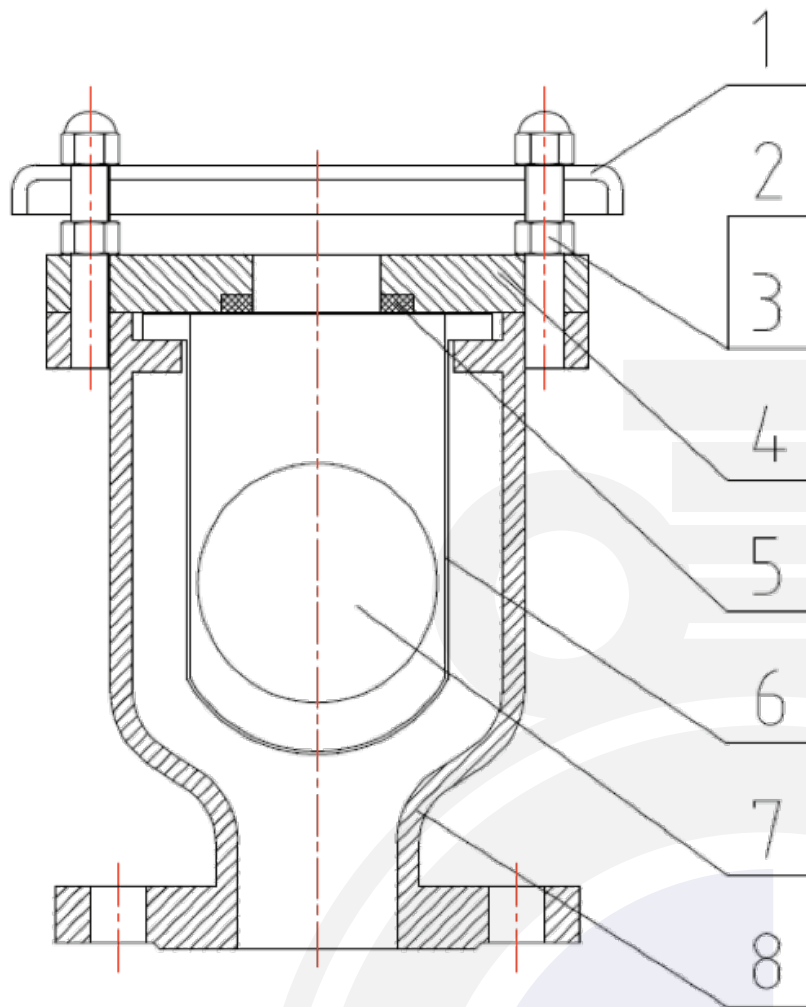


Technical Data

1. Size range: Flange NPS 2"~8" Threaded: NPS 1"~2"
2. Pressure ratings: 150LB / 300LB / 600LB
3. Working temperature: -29°~ +180°C.
4. Suitable Medium: most corrosive fluids without solid particles, sea water, sulfuric acid 98% concentration, corrosive chemicals, gasoline, petroleum, and so on.
5. Body Material: ASTM A351 CF3M
6. Trim Material: SS316L CF3M
7. Seat: Viton

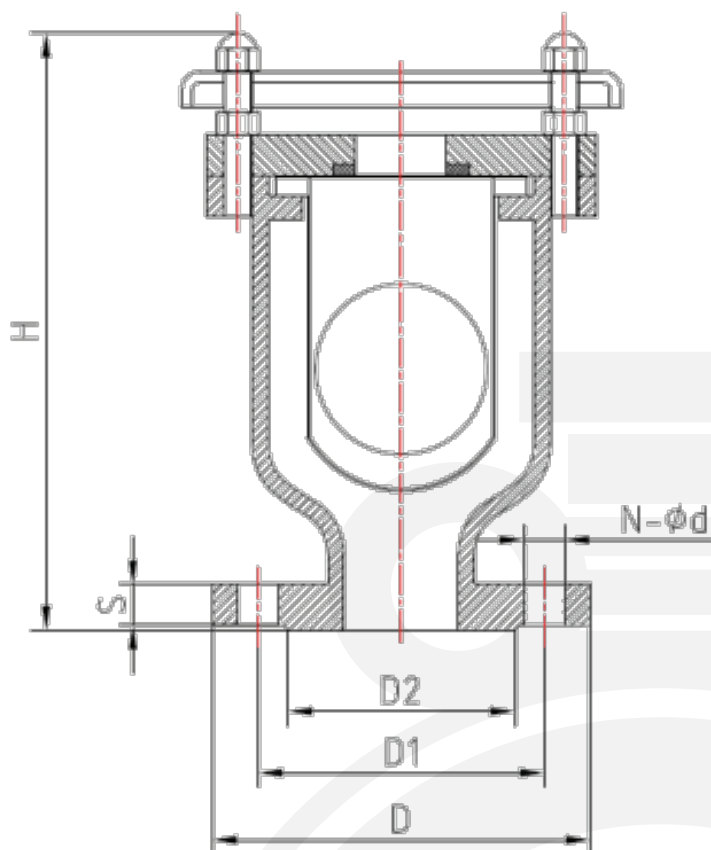
Performance Standard

1. Design & Manufacture standard as to: ASME B31.3 ASME B16.34
2. Height dimension (H) standard as to: MFR-STD
3. Flange dimension conforms as to: ASME B16.5 / BS EN 1092 NPT Threaded Standard as to: ASME B1.20.1
4. Testing And Inspection as to: API 598
5. Pressure-temperature conforms as to: ASME B16.34
6. Anti Corrosion as per NACE MR-0175(2002) requirement
7. Rating Class 600 upon request



Part List:

No.	Part Name	Material	Standard
1.	Cap	F304	ASTM A182
2.	Bolt	B8M	ASTM A193
3.	Nut	8M	ASTM A194
4.	Cover	F316L	ASTM A182
5.	Seat	Viton	USA DuPont
6.	Protective Bushing	SS316L	ASTM A276
7.	Floating Ball	SS316L	ASTM A276
8.	Body	CF3M	ASTM A351



Main dimension

Class 150LB RF

Flange dimension standard conforms as to: ASME B16.5

NPS	H	D	D1	D2	S	N-Φ	f	Weight
2"	260	150	120.7	92	17.5	4-Φ19	2	12 Kg
2 1/2"	270	180	139.7	105	21	4-Φ19	2	17 Kg
3"	270	190	152.4	127	22.5	4-Φ19	2	18 Kg
4"	300	230	190.5	157	22.5	8-Φ19	2	24 Kg
6"	370	280	241.3	216	24	8-Φ22	2	36 Kg
8"	420	345	298.5	270	27	8-Φ22	2	55 Kg

Class 300LB RF

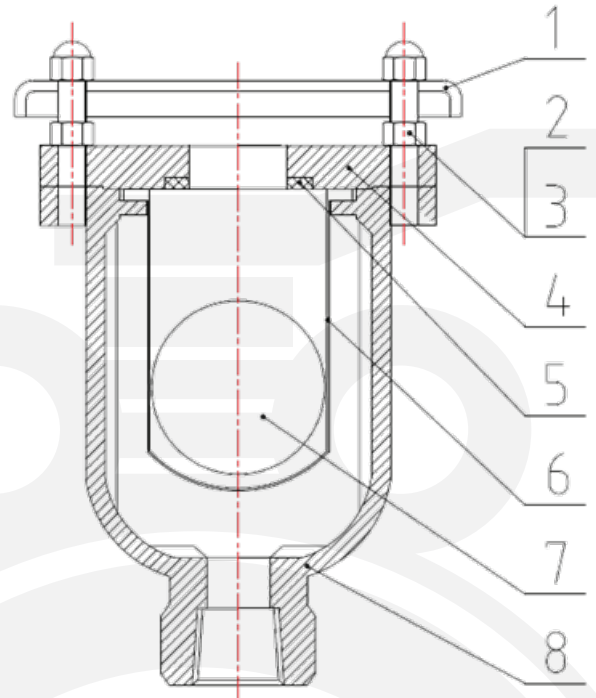
Flange dimension standard conforms as to: ASME B16.5

NPS	H	D	D1	D2	S	N-Φ	f	Weight
2"	260	165	127	92	21	8-Φ19	2	16 Kg
2 1/2"	270	190	149.2	105	24	8-Φ22	2	20.5 Kg
3"	270	210	168.3	127	27	8-Φ22	2	22 Kg
4"	300	255	200	157	30.5	8-Φ22	2	32 Kg
6"	370	320	269.9	216	35	12-Φ22	2	55 Kg
8"	420	380	330.2	270	40	12-Φ25.5	2	65 Kg

Omega Double Effect Air Vent Thread NPT End:

Part List of Thread NPT End:

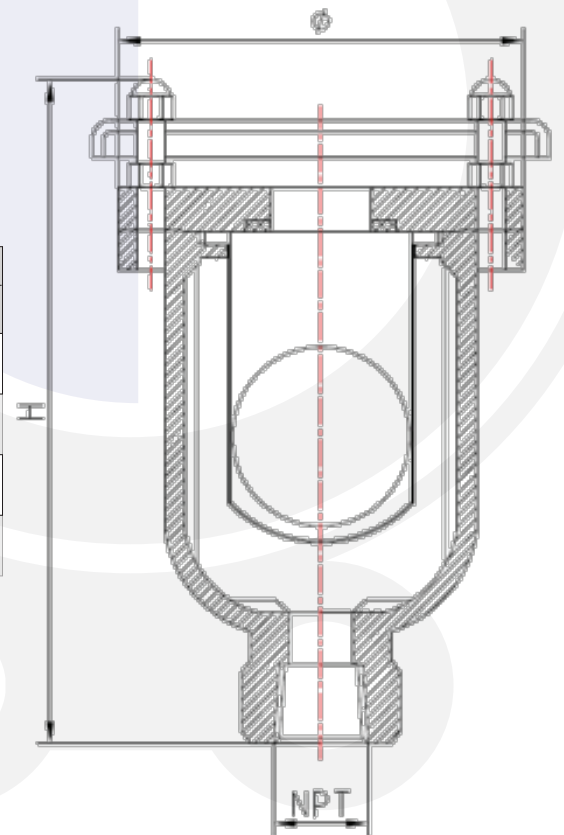
No	Name	Material	Standard
1.	Cap	F304	ASTM A182
2.	Bolt	B8M	ASTM A193
3.	Nut	8M	ASTM A194
4.	Cover	F316L	ASTM A182
5.	Seat Protective	Viton	USA DuPont
6.	Protective Bushing	SS316L	ASTM A276
7.	Floating Ball	SS316L	ASTM A276
8.	Body	CF3M	ASTM A351



Omega Dimension of Thread Standard as to ASME B1.20.1

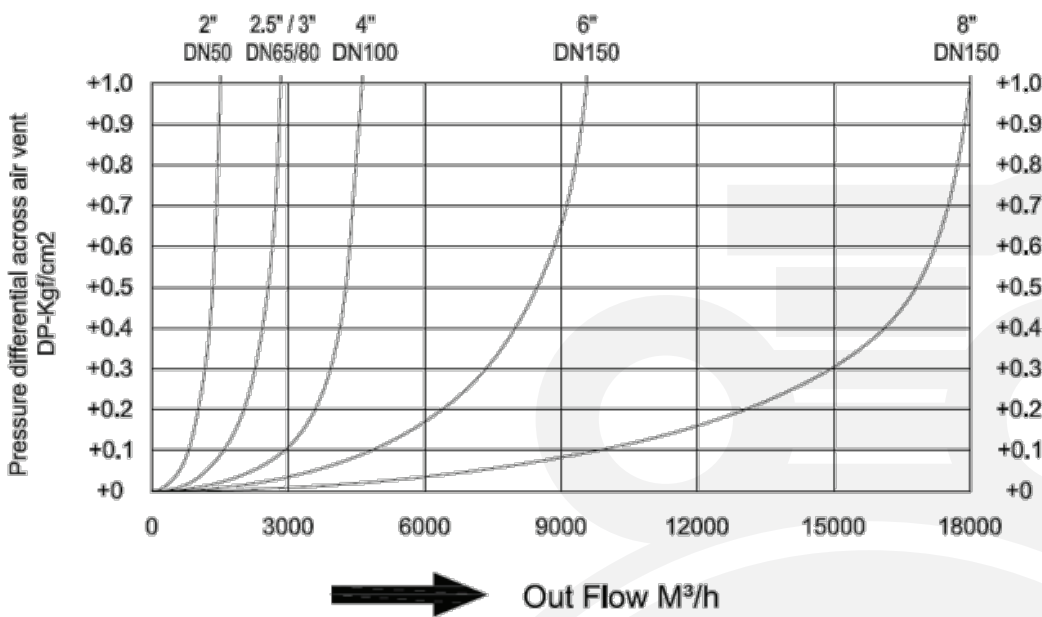
Class 150LB / 300LB NPT Threaded End

NPS	NPT	H	Φ	Weight Kg	
				150LB	300LB
1"	1"	210	135	5	5.6
1 1/4"	1 1/4"	210	135	5.5	6
1 1/2"	1 1/2"	215	150	7	7.5
2"	2"	215	150	8	9

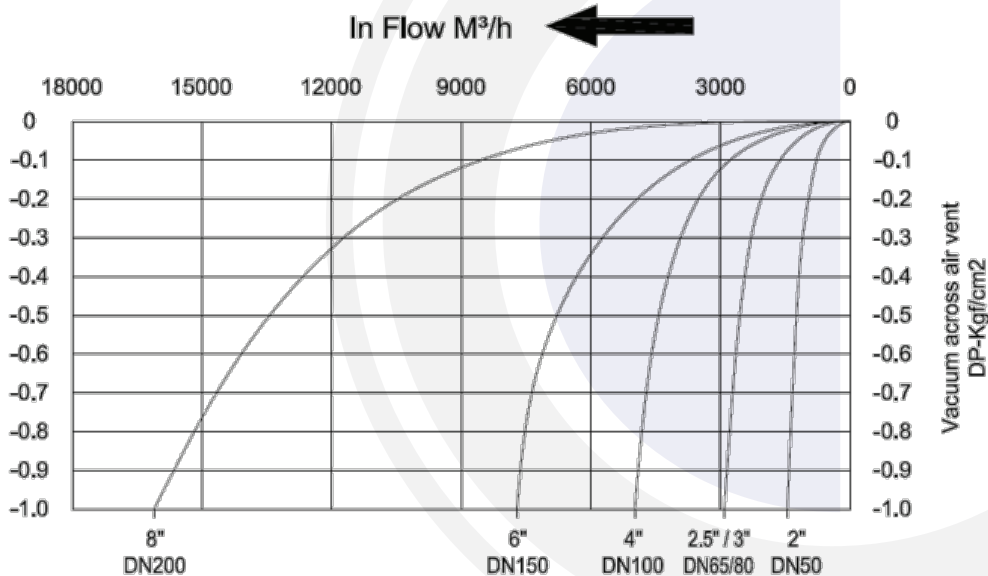


Omega TM Discharge capacity by size, Flanged End:

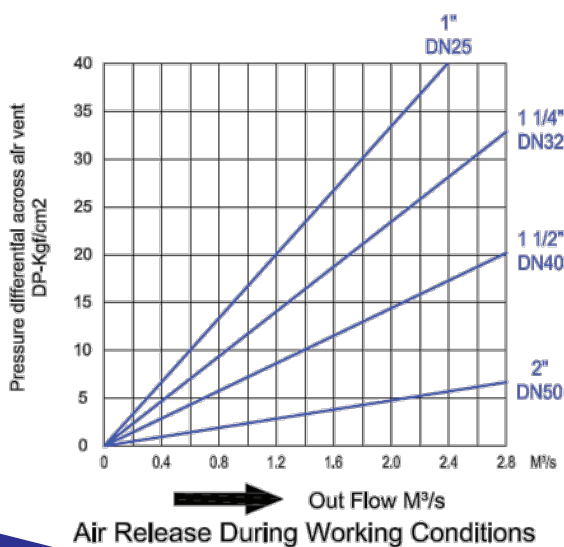
Fox TM Discharge flow rate capacity, by size



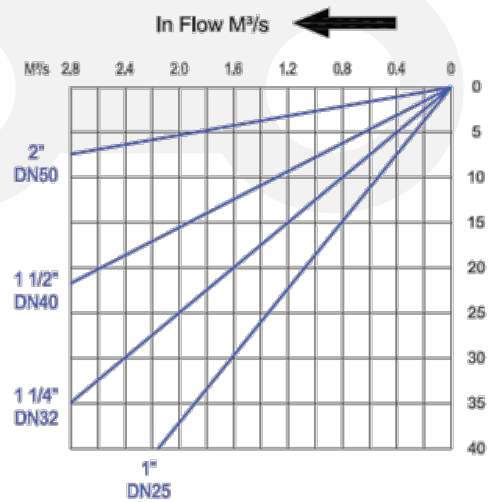
Omega Vacuum flow Charge Capacity by size, Flanged End:



Omega Discharge Capacity by size, Thread NPT End:



Omega Vacuum flow Charge Capacity by size, Thread NPT End:



ORDERING CODE:

Example: OMEGA SS-22-121-200

Model: OMEGA SUPER STEEL SERIES CLASS 150
SS316L CF3M Body
SS316L CF3M Interior and floating ball
Viton Seat
Flanged End RF
Rating Class 150
SIZE: 2"

Available Body Material Code:

SS316 CF8M Stainless Steel: 1
SS316L CF3M Stainless Steel: 2
Duplex 2205 Super Alloy Steel: 3
Super Duplex 2507 Super Alloy Steel: 4
Hastelloy C-276 Super Alloy: 5
CN7M Alloy 20 Super Alloy: 6
SS304 CF8 Stainless Steel: 7

Available Trim and Floating Ball Material Code:

SS316 CF8M Stainless Steel: 1
SS316L CF3M Stainless Steel: 2
Duplex 2205 Super Alloy Steel: 3
Super Duplex 2507 Super Alloy Steel: 4
Hastelloy C-276 Super Alloy: 5
CN7M Alloy 20 Super Alloy: 6
SS304 CF8 Stainless Steel: 7

Available Seat Material Code:

Viton: 1
EPDM: 2
NBR: 3

Available Connection Code:

Thread NPT: 1
Flanged End: 2

Available Connection Code:

Class 150: 1
Class 300: 2
Class 600: 3

Available Size Code:

1": 100
1 ¼": 125
1 ½": 150
2": 200
2 ½": 250
3": 300
4": 400
6": 600
8": 800