

Fox™ Triple Effect Air Vent + Anti Water Hammer

Cast Steel Series

Bleeding and Venting Air Vent, Fox™ Combination kinetic air release valve provide 3 functions in one:

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

Fox™ Cast Steel Series Air Vent is a release valve, single chamber, triple function with an advanced design with simple mechanism, strong float made in SS316 to prevent cracking during sudden water hammer & quick closure. Aero kinetic mechanism to resist blow shut under higher air velocity even up to sonic velocity of air. During pipe filling it is necessary to discharge as much air as water flows in. FOX™ Air Vent will make sure to perform this task allowing the release during hard working conditions.

Following Archimedes' principle, the float, no longer sustained by water thrust, falls down to free the nozzle hole helping the release of the air pocket, while the upper disk closes the main orifice due to internal pressure. FOX™ avoids the air entrance thanks to a special system, composed of a spring, float and o-ring, whose high sensitivity and accuracy allows the air discharge with a DP across the valve between 0,03 and 0,05 bar.



Features:

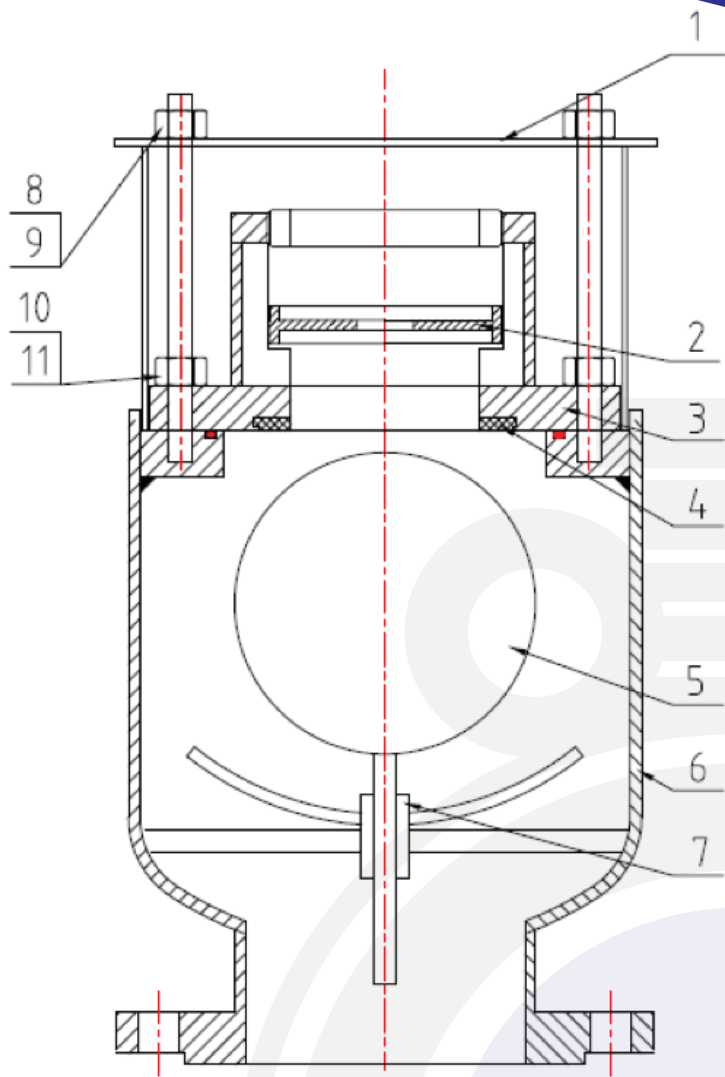
- A) **Three function** in one design + Anti Water Hammer
- B) **Body** made in long lasting A216 WCB Cast Steel
- C) **Standard** epoxy coating suitable for highly aggressive environments (Epoxy paint).
- D) **Standard** trim and floating ball made in stainless steel SS316 CF8M
- (E) **Standard** NBR seat suitable for oil, petrol and water
- (F) **Standard** outside screen for safety and prevent insects or birds in.
- (G) **No arms or levers to prevent vibrating**, bending, direct closure of the float
- (H) **Suitable for harsh conditions:** oil, fuel, waterlines, clean water, irrigation, and non-corrosive chemical media without solid particles.
- (I) **Maintenance** can be easily performed from the top without removing the air valve from the pipe.
- (J) **Reduces** pressure drop.
- (K) **Flange** drilling and dimension meets ANSI flange

Technical Data

1. Size range: NPS 2"~8"
2. Pressure ratings: 150LB / 300LB
3. Working temperature: -29°~ +80°C.
4. Suitable Medium: non-corrosive fluids without solid particles, clean water, industrial water, fuel, oil, and so on.
5. Body Material: ASTM A216 WCB
6. Standard Trim Material: SS316 CF8M
7. Standard Seat: NBR
8. Standard Floating ball: SS316 CF8M

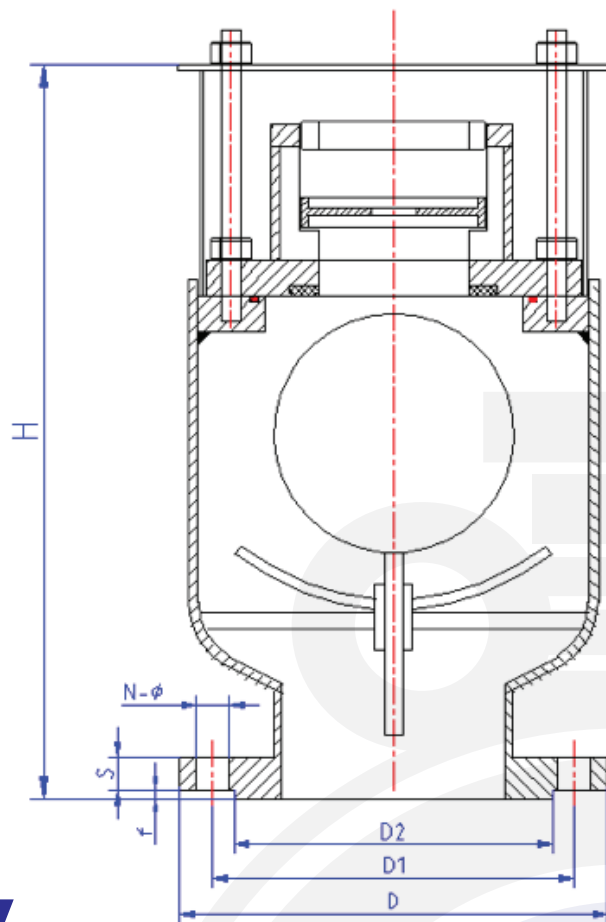
Performance Standard

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
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. Pressure Rating Class 600 Available upon request



Part List:

No.	Part Name	Material	Standard
1.	Cap	F304	ASTM A182
2.	Restriction Orifice	F316	ASTM A182
3.	Cover	C.S.	ASTM A105
4.	Seat	NBR	BNS-D00040
5.	Floating Ball	SS316	ASTM A276
6.	Body	C.S.	ASTM A216 WCB
7.	Buffer bracket	SS316	ASTM A276
8.	Bolt	B7 (Galvanized)	ASTM A193
9.	Nut	2H (Galvanized)	ASTM A194
10.	Bolt	B7	ASTM A193
11.	Nut	2H	ASTM A194



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"	350	150	120.7	92	17.5	4-Φ19	2	20 Kg
2 1/2"	380	180	139.7	105	21	4-Φ19	2	26.5 Kg
3"	380	190	152.4	127	22.5	4-Φ19	2	28 Kg
4"	400	230	190.5	157	22.5	8-Φ19	2	39 Kg
6"	480	280	241.3	216	24	8-Φ22	2	44 Kg
8"	620	345	298.5	270	27	8-Φ22	2	75 Kg

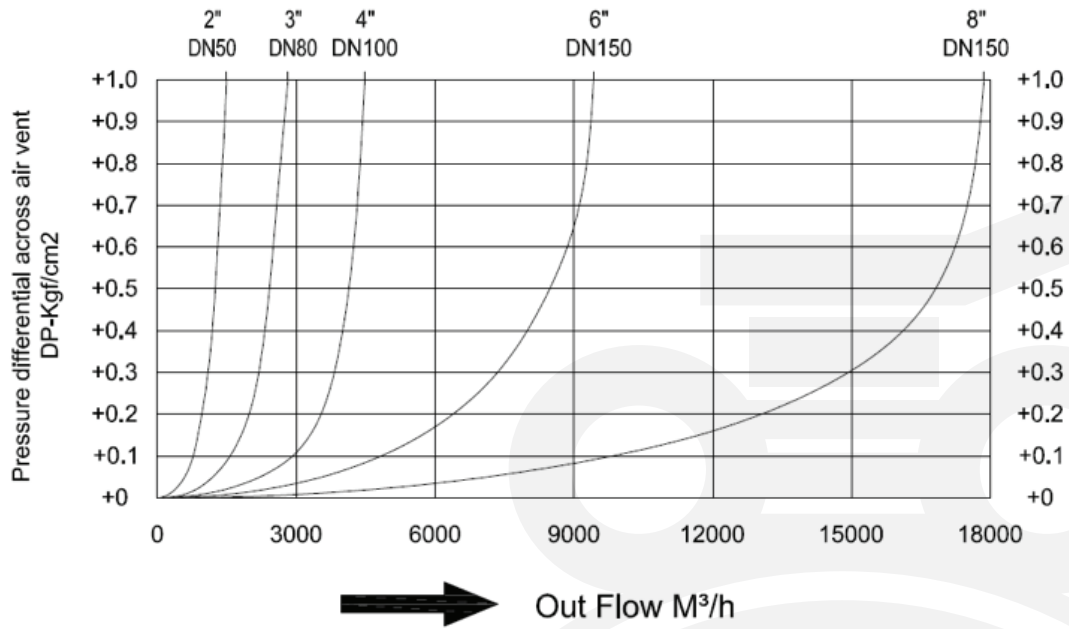
Class 300LB RF

Flange dimension standard conforms as to: ASME B16.5

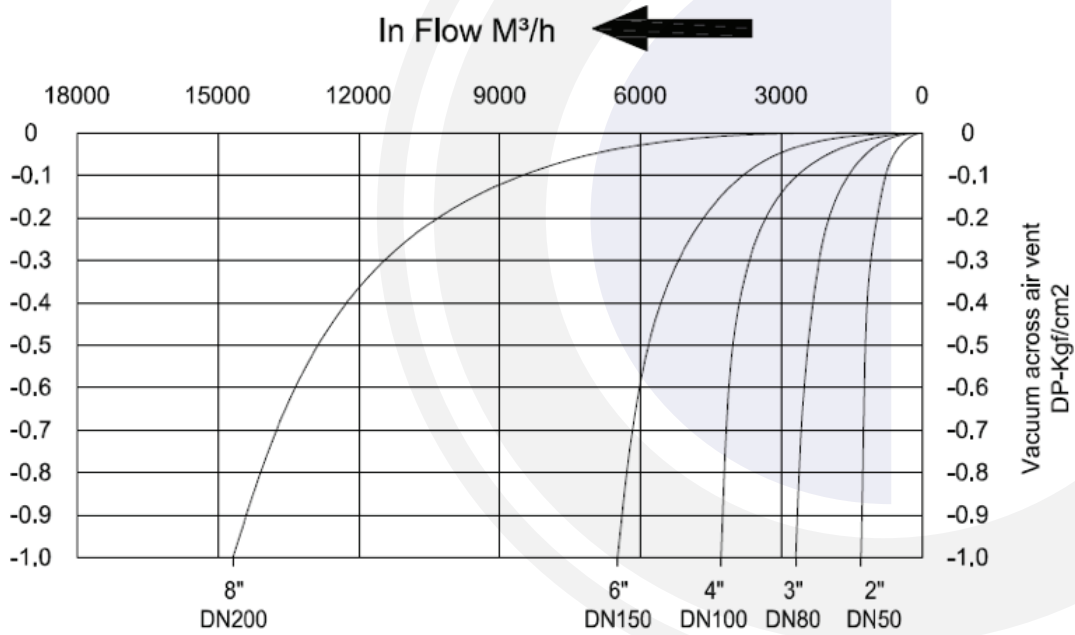
NPS	H	D	D1	D2	S	N-Φ	f	Weight
2"	350	165	127	92	21	8-Φ19	2	25 Kg
2 1/2"	380	190	149.2	105	24	8-Φ22	2	28.5 Kg
3"	380	210	168.3	127	27	8-Φ22	2	30 Kg
4"	400	255	200	157	30.5	8-Φ22	2	45 Kg
6"	480	320	269.9	216	35	12-Φ22	2	55 Kg
8"	620	380	330.2	270	40	12-Φ25.5	2	82 Kg

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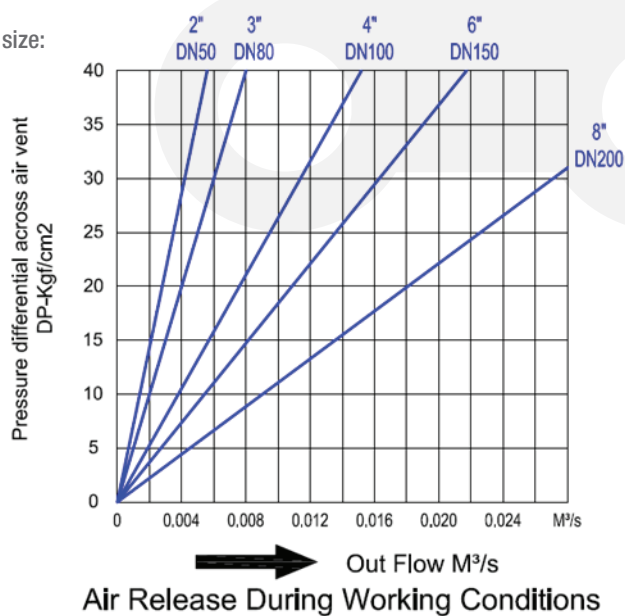
Fox™ Discharge flow rate capacity, by size



Fox™ vacuum flow rate, by size



Fox™ automatic air flowing out capacity, at high pressure, by size:



ORDERING CODE:

Example: FOXCS-23-150RF-200

Model: FOX AIR VENT CAST STEEL SERIES CLASS 150
Standard A216 WCB Body
SS316 CF8M Trim and floating ball
NBR Buna Seat and O'Ring
Ansi Class 150 Flanged End RF
SIZE: 2"

Available Trim and Floating ball Material Code:

SS304 CF8 Stainless Steel: 1
SS316 CF8M Stainless Steel: 2
SS316L CF3M Stainless Steel: 3

Available Seat and O'Ring Material Code:

Viton: 1
EPDM: 2
NBR Buna: 3

Available Size Code:

2": 200
2 ½": 250
3": 300
4": 400
6": 600
8": 800