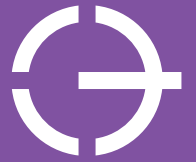


A.R.I. D-26



Wastewater

Combination Air Valve for Wastewater

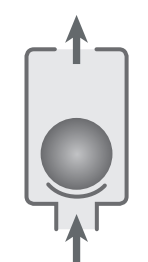
Description

The D-26 Series, is a full bore Combination Air Valve. Installed on a non-clean water transmission system, the Air Valve is designed to improve hydraulic operation by protecting the pipeline, increasing pipeline efficiency and reducing energy requirements. A continuous air gap in the valve body separates the wastewater from the sealing mechanism.

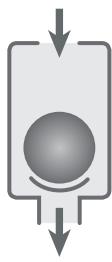
Installation

- Wastewater & water treatment plants
- Wastewater and effluent water transmission lines

Operation



Air Discharge



Air Intake



Automatic
Air Release



One Way Out




One Way In



Non Slam

Features and Benefits

Conical body shape & unique design	maximum air gap / minimum body length
Continuous air gap	separates the liquid from the sealing mechanism
Float assembly and sealing mechanism linkage	free movement, turbulence will not unseat the sealing mechanism
Funnel-shaped lower body	residue matter falls back into the system pipeline
All parts are suitable for corrosive liquid and environment	non-corrosive and durable
Spray Guard®	flow enhancer, prevents spraying from valve outlet
Drainage tap	releases pressure and drains valve prior to maintenance
Flow cross-sections equal or greater than port area	maximum flow
 ATEX certified air valves	certification is conditional on the customer connecting the designated part on the product to a dedicated ground connection point.

Technical Specifications

Size Range	2" - 8"												
Sealing pressure range	<table border="0"> <tr> <td>2"</td> <td>0.29-150 psi</td> <td>1.5 - 250 psi</td> <td></td> </tr> <tr> <td>3"</td> <td>0.29-150 psi</td> <td>1.5 - 250 psi</td> <td>3-360 psi</td> </tr> <tr> <td>4" - 8"</td> <td></td> <td>1.5 - 250 psi</td> <td></td> </tr> </table> <p>Testing pressure: 1.5 times maximum working pressure</p>	2"	0.29-150 psi	1.5 - 250 psi		3"	0.29-150 psi	1.5 - 250 psi	3-360 psi	4" - 8"		1.5 - 250 psi	
2"	0.29-150 psi	1.5 - 250 psi											
3"	0.29-150 psi	1.5 - 250 psi	3-360 psi										
4" - 8"		1.5 - 250 psi											
Temperature	<p>Maximum working temperature: 140 F</p> <p>Maximum intermittent temperature: 194 F</p>												
Valve coating	Fusion bonded epoxy coating in compliance with standard DIN 30677-2 (applied on Cast Steel and Cast Ductile Iron valves)												

Upon ordering, please specify: model, size, working pressure, thread / flange standard and type of liquid

Valve Selection Options

Valve Connection	Threaded BSP/NPT or flanged ends to meet various requested standards
Optional Covers (for air discharge direction and for add-on components)	2" models - two-directional cover is standard 3" models - optional one directional or two-directional covers 4" models - one-directional elbow for horizontal discharge can be removed to allow for vertical discharge 6"-8" models - vertical or horizontal discharge outlets
Optional Add-on Components (2", 3", 4" sizes only)	One-way, Out-only attachment - allows for air discharge only, prevents air intake. Vacuum Breaker, In-only attachment - allows for air intake only, prevents air discharge. Non-Slam discharge-throttling attachment, allows for free air intake, throttles air discharge.
Additional Product Configurations	Model D-26 NS with a built-in Non-slam Disc (6" & 8" sizes only) SB Underground Air Valve System

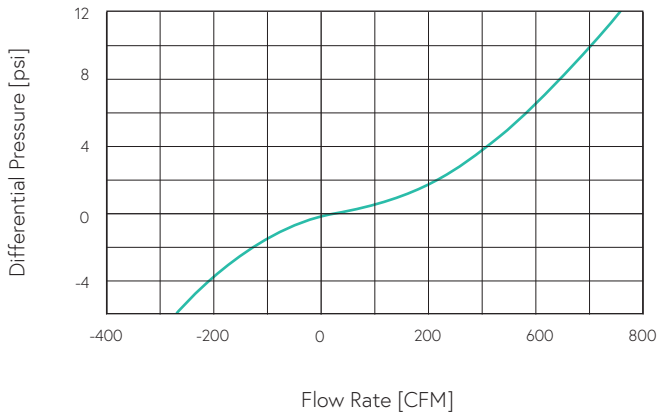
Non-Slam Add-on Component Data Table for Variable Orifices

Size	Number of orifices	Discharge orifice (Inch)	Total NS area (Sq2)	NS orifice (Inch)	Switching point (psi)	Flow at 5.8 PSI (CFM)
2" (50mm)	1 orifice	2"	0.024	0.18	Spring loaded normally closed	14
	2 orifices	2"	0.049	0.25		19
	3 orifices	2"	0.074	0.31		24
3" (80mm)	1 orifice	3"	0.078	0.31	Spring loaded normally closed	38
	2 orifices	3"	0.156	0.44		52
	3 orifices	3"	0.234	0.55		62
4" (100mm)	1 orifice	4"	0.122	0.39	Spring loaded normally closed	88
	2 orifices	4"	0.243	0.56		112
	3 orifices	4"	0.365	0.68		137
6" (150mm)	1 orifice with graduated closure	6"	1.096	1.18	0.36	930
8" (200mm)		8"	2.544	1.80	0.36	1112

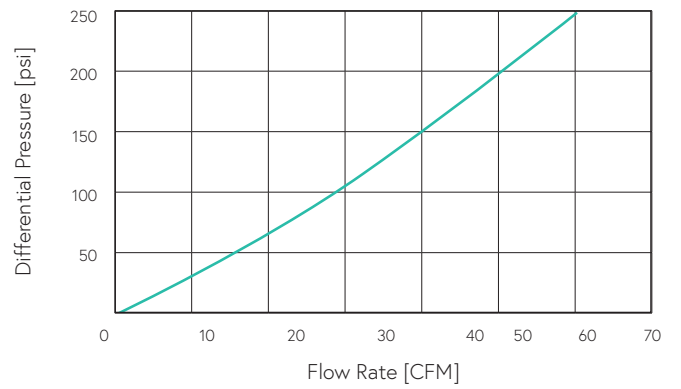
Flow Charts

D-26 2"

Air & Vacuum Flow Rate

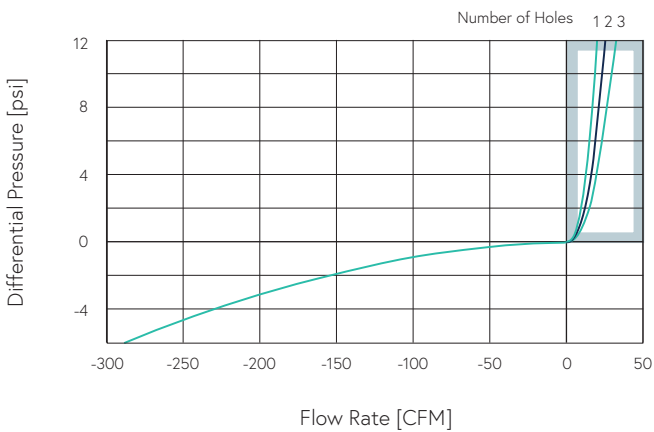


Automatic Air Release Flow Rate

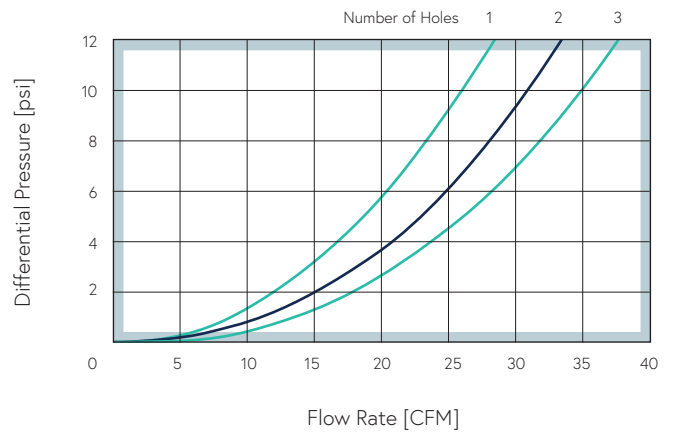


D-26 NS 2"

Air & Vacuum Flow Rate



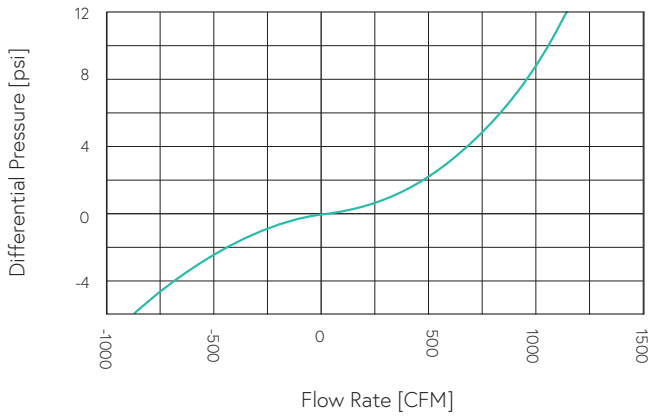
Air Flow Rate



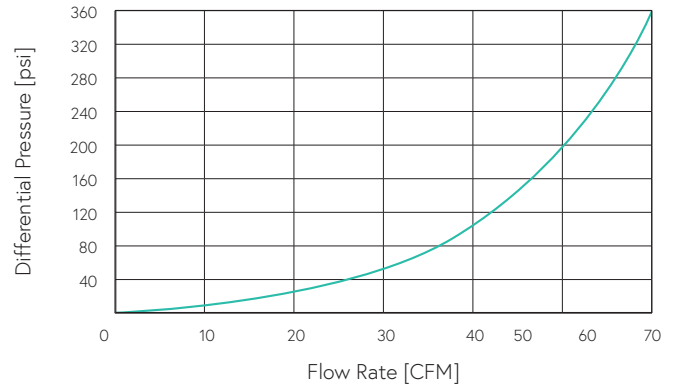
Flow Charts

D-26 3"

Air & Vacuum Flow Rate

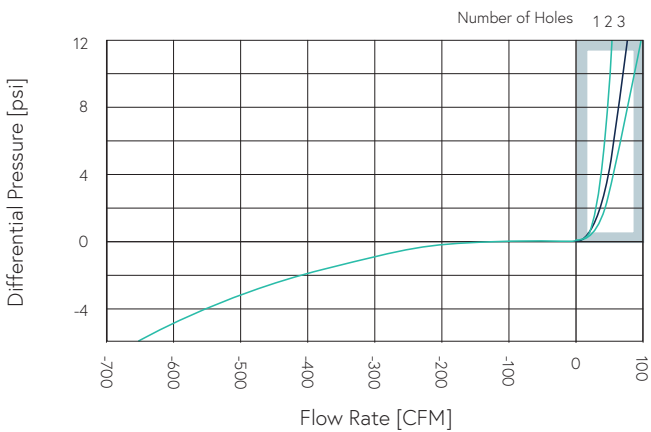


Automatic Air Release Flow Rate

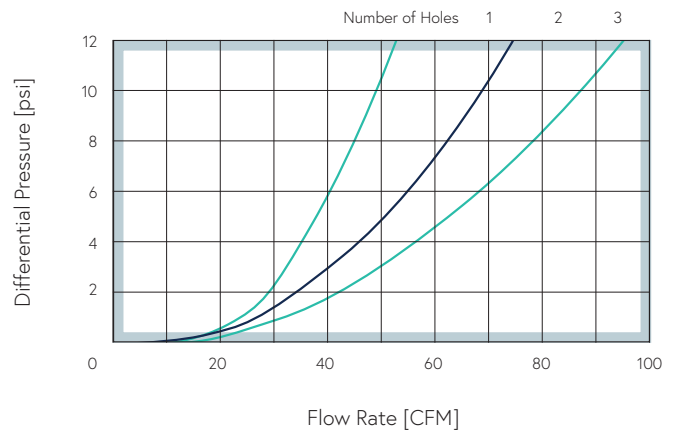


D-26 NS 3"

Air & Vacuum Flow Rate



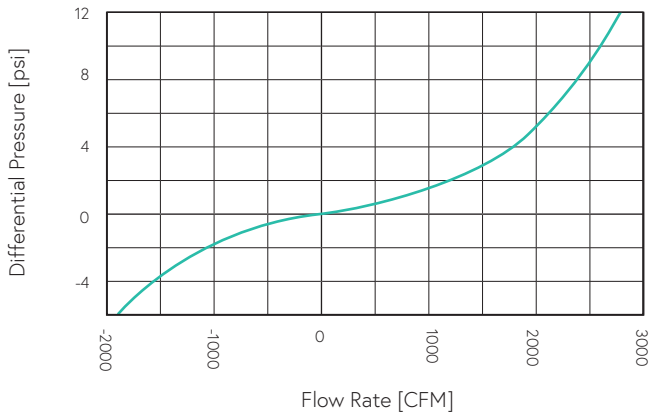
Air Flow Rate



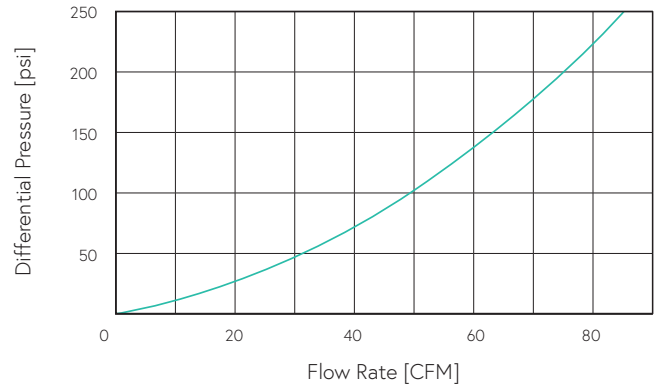
Flow Charts

D-26 4"

Air & Vacuum Flow Rate

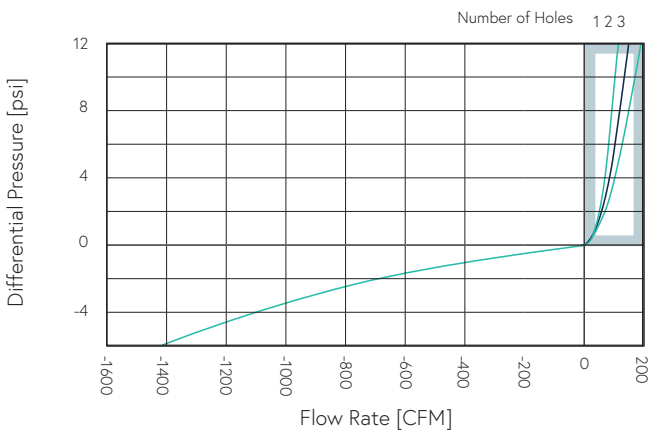


Automatic Air Release Flow Rate

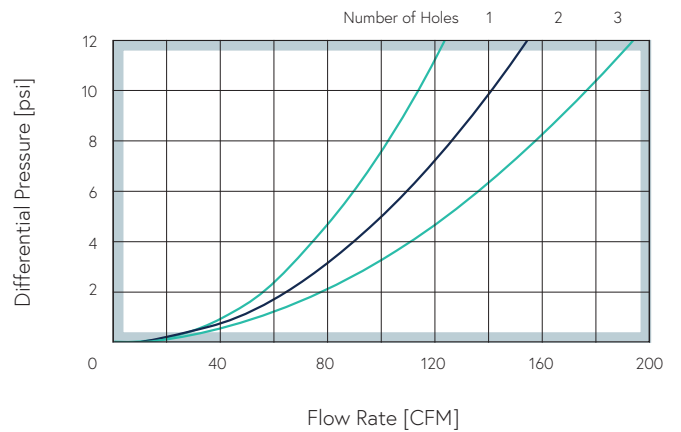


D-26 NS 4"

Air & Vacuum Flow Rate



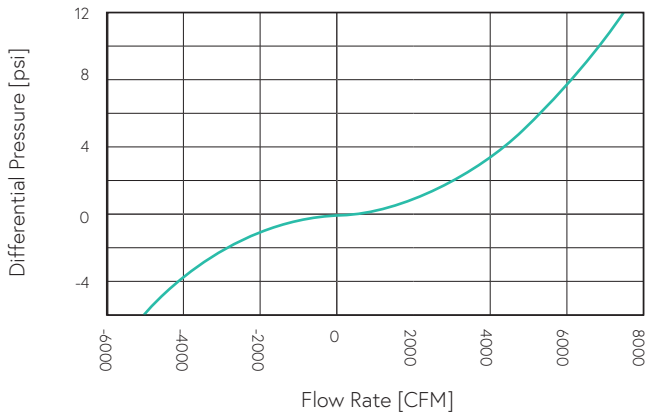
Air Flow Rate



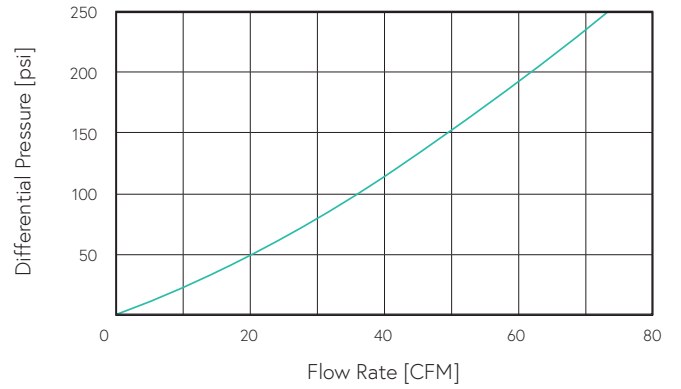
Flow Charts

D-26 6"

Air & Vacuum Flow Rate

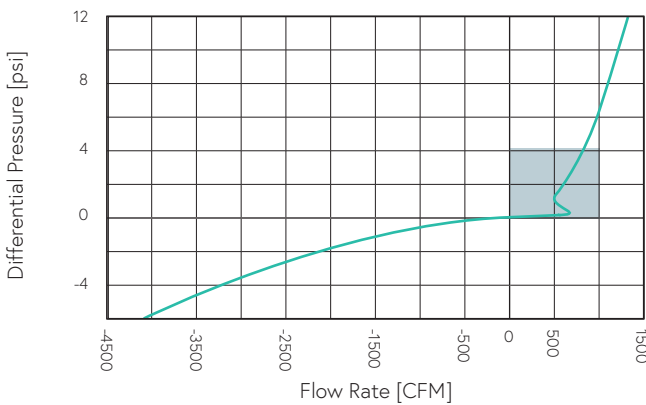


Automatic Air Release Flow Rate

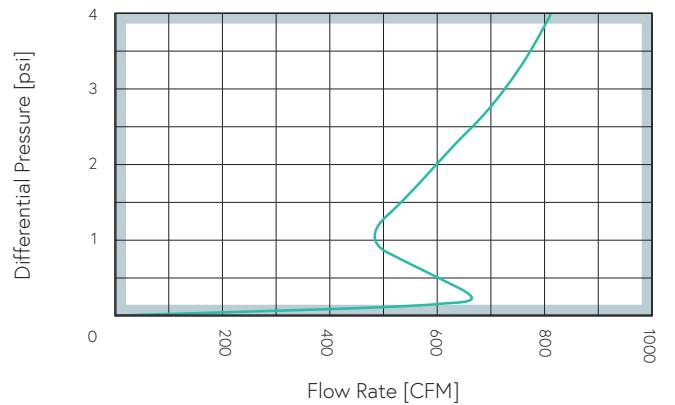


D-26 NS 6"

Air & Vacuum Flow Rate



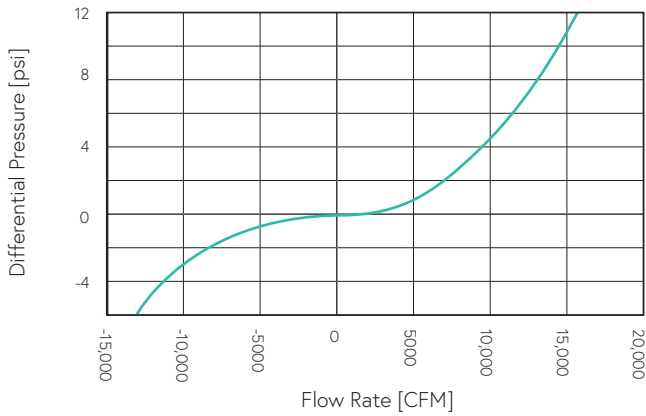
Air Discharge Switching Region



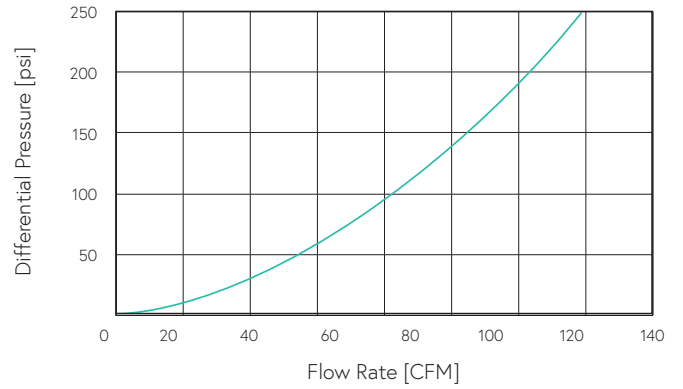
Flow Charts

D-26 8"

Air & Vacuum Flow Rate

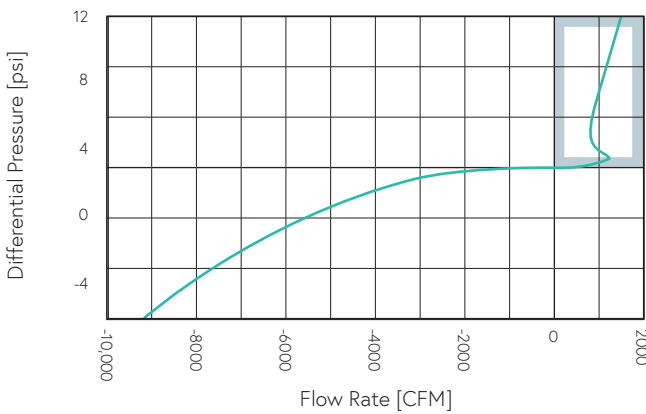


Automatic Air Release Flow Rate

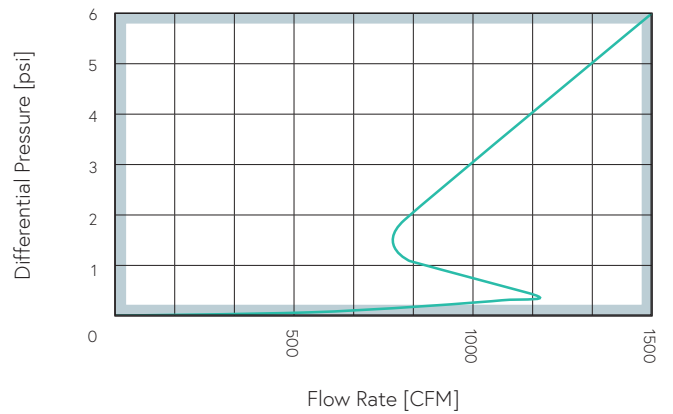


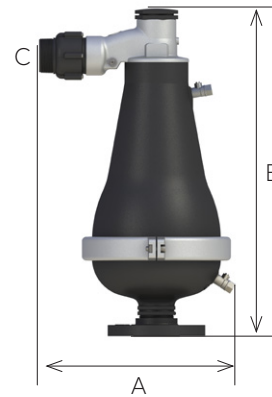
D-26 NS 8"

Air & Vacuum Flow Rate



Air Discharge Switching Region





FL - Flanged
THR - Threaded
RN - Reinforced Nylon
DI - Ductile Iron

Dimensions and Weight

Model	Dimensions (Inch)		Connection	Weight (Lbs)		Orifice Area (Sq2)	
	A	B		C	RN	ST ST	A / V
D-26 2" (50 mm) THR	10.1	21.3	2" NPSM Female	18	29	3.04	0.0133
D-26 2" (50 mm) FL	10.1	21.6	2" NPSM Female	19	35	3.04	0.0133
D-26 NS 2" (50 mm) THR	12.9	21.3	2" NPSM Male	19	30	3.04	0.0133
D-26 NS 2" (50 mm) FL	12.9	21.6	2" NPSM Male	20	36	3.04	0.0133
				Cast Steel	ST ST		
D-26 3" (80 mm) THR	19.3	24.2	3" NPSM Female	48	51	7.787	0.024
D-26 3" (80 mm) FL	19.3	24.2	3" NPSM Female	54	56	7.787	0.024
D-26 NS 3" (80 mm) THR	23.6	24.2	3" NPSM Male	50	53	7.787	0.024
D-26 NS 3" (80 mm) FL	23.6	24.2	3" NPSM Male	55	57	7.787	0.024
				RN			
D-26 3" (80 mm) THR	13.7	23.9	3" NPSM Female	33	-	7.787	0.024
D-26 3" (80 mm) FL	13.7	24.4	3" NPSM Female	34	-	7.787	0.024
D-26 NS 3" (80 mm) THR	17.0	23.9	3" NPSM Male	34	-	7.787	0.024
D-26 NS 3" (80 mm) FL	17.0	24.4	3" NPSM Male	36	-	7.787	0.024
				DI	ST ST		
D-26 4" (100 mm) FL	19.8	32.4	4" Flanged NPSM F	96	101	12.17	0.048
D-26 NS 4" (100 mm) FL	22.5	33.1	4" Flanged NPSM F	107	112	12.17	0.048
Vertical Cover				DI	ST ST		
D-26 6" (150 mm) FL	19.4	32.3	6" Flanged / Grooved	206	98.0	27.39	0.048
D-26 8" (200 mm) FL	24.1	42.2	8" Flanged / Grooved	328	157.0	48.67	0.048
Horizontal Cover				DI	ST ST		
D-26 6" (150 mm) FL	20.7	36.7	6" Flanged / Grooved	220	106.0	27.39	0.048
D-26 8" (200 mm) FL	25.2	48.4	8" Flanged / Grooved	350	164.0	48.67	0.048

NOTE

The cover assembly with the discharge elbow can be set in four directions. Dimension A in the picture and in the table shows the maximum product width. This width can be reduced by changing the direction.

All product weights and dimensions are approximate, due to the differences in flange standards, materials and variable accessories.

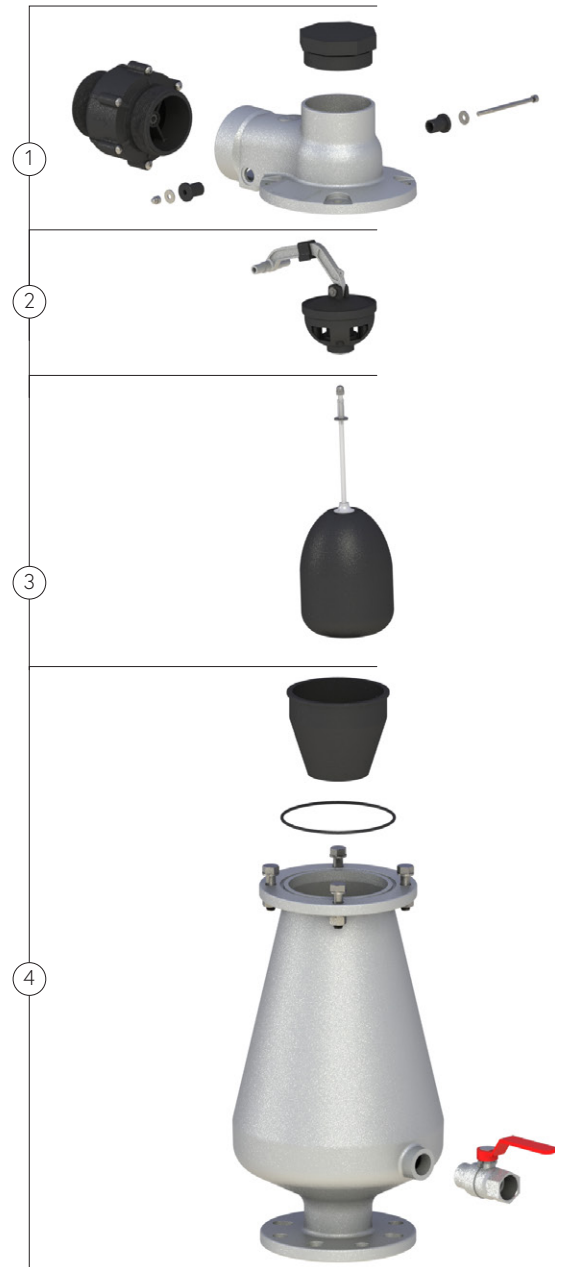
Parts List and Specifications | 2" 3" Nylon

Part	Material
1. Cover Assembly	
1a. Orifice Plug	Polypropylene
1b. Cover	Stainless Steel 316
1c. Bolt Assembly	Stainless Steel 316 + Reinforced Nylon
1d. Non-Slam Component (optional)	Reinforced Nylon / Polypropylene + Stainless Steel
2. Seal Assembly	
2a. Disc Arm	Cast Stainless Steel
2b. Air & Vacuum Disc	Cast Stainless Steel / Reinforced Nylon
2c. Air & Vacuum Seal	EPDM
2d. Air Release Seal & Seat	EPDM & Reinforced Nylon
2e. Seal Cover	Reinforced Nylon
3. Body Assembly	
3a. O-Ring	NBR
3b. Spray Guard®	Polypropylene
3c. Body	Reinforced Nylon
3d. Tap	Stainless Steel
4. Float Assembly	
4a. Domed Nut	Stainless Steel 316
4b. Stopper	Polypropylene
4c. Spring	Stainless Steel 316
4d. Float & Rod	Polypropylene + Stainless Steel 316
5. Base Assembly	
5a. O-Ring	NBR
5b. Clamp Assembly	Cast Stainless Steel + Stainless Steel 316
5c. Base	Reinforced Nylon
5d. Tap	Stainless Steel



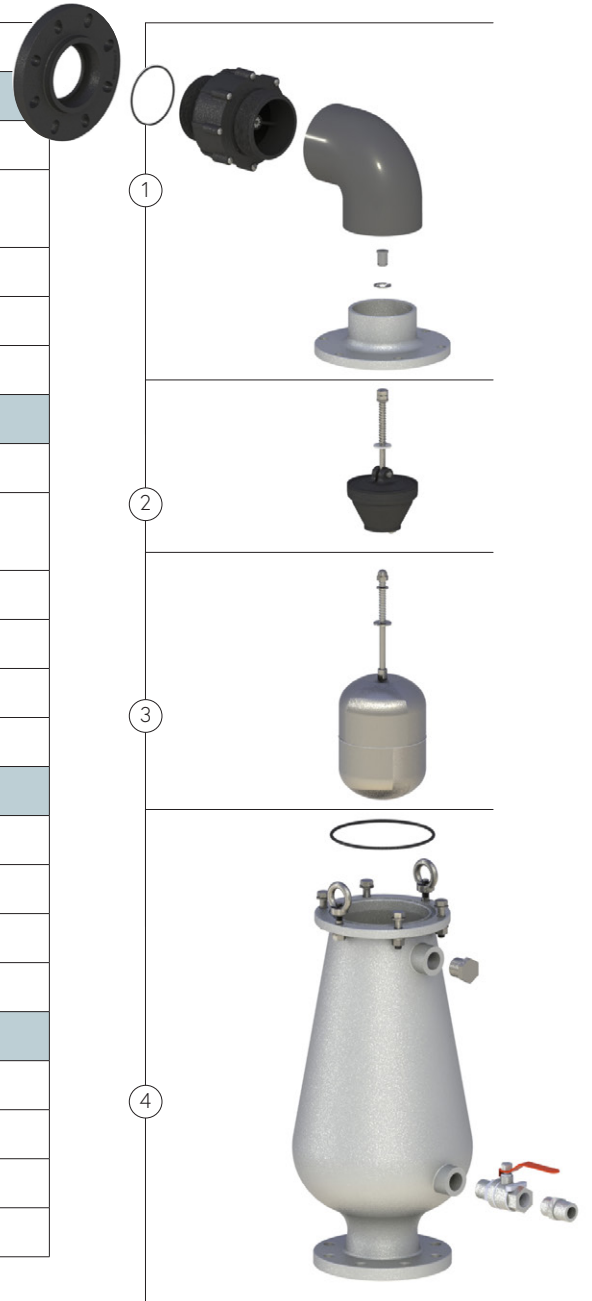
Parts List and Specification | 3" Metal

Part	Material
1. Cover Assembly	
1a. Orifice Plug	Polypropylene
1b. Cover	Stainless Steel 316
1c. Bolt Assembly	Stainless Steel 316 + Reinforced Nylon
1d. Non-Slam Component (optional)	Reinforced Nylon / Polypropylene + Stainless Steel
2. Seal Assembly	
2a. Disc Arm	Cast Stainless Steel
2b. Air & Vacuum Disc	Cast Stainless Steel / Reinforced Nylon
2c. Air & Vacuum Seal	EPDM
2d. Air Release Seal & Seat	EPDM & Reinforced Nylon
2e. Seal Cover	Reinforced Nylon
3. Float Assembly	
3a. Domed Nut	Stainless Steel 316
3b. Stopper	Polypropylene
3c. Spring	Stainless Steel 316
3d. Float & Rod	Polypropylene + Stainless Steel 316
4. Body Assembly	
4a. Spray Guard®	Polypropylene
4b. O-Ring	NBR
4c. Body	Cast Steel / Stainless Steel 316
4d. Ball Valve	Stainless Steel 316



Parts List and Specification | 4" Metal

Part	Material
1. Cover Assembly	
1a. Flange	
1b. Non-Slam Component (optional)	Reinforced Nylon / Polypropylene + Stainless Steel
1c. Discharge Elbow	PVC
1d. Cover	Ductile Iron / Stainless Steel 316
1e. Orifice Seat	Stainless Steel 316
2. Seal Assembly	
2a. Guide Rod Assembly	Stainless Steel 316 + Acetal
2b. Air & Vacuum Disc	Reinforced Nylon / Reinforced Polypropylene
2c. Air & Vacuum Seal	EPDM
2d. Air Release Seal & Seat	EPDM & Reinforced Nylon
2e. Seal Cover	Reinforced Nylon
2f. Flow Enhancer	ABS
3. Float Assembly	
3a. Domed Nut	Stainless Steel 316
3b. Stopper	Polypropylene
3c. Spring	Stainless Steel 316
3d. Float & Rod	Stainless Steel 316
4. Body Assembly	
4a. O-Ring	NBR
4b. Body	Ductile Iron / Stainless Steel 316
4c. Plug	Stainless Steel 316
4d. Ball Valve	Stainless Steel 316



Parts List and Specification | 6"-8" Metal

No.	Parts	Material
1	Discharge Assembly	
1a	Flange seal (optional)	NBR
1b	Grooved flange (optional)	Ductile Iron / Stainless Steel 316
1c	"Horizontal discharge / Vertical discharge"	Ductile Iron / Stainless Steel 316
2	Non-slam Disc - Optional	Ductile Iron / Stainless Steel 316
3	Cover Assembly	
3a	O-ring	EPDM
3b	Cover	Ductile Iron / Stainless Steel 316
3c	Orifice Seat	Stainless Steel 316
4	Float & Seal Assembly	
4a	Guide Rod Assembly	Stainless Steel 316 + Acetal
4b	Air & Vacuum Disc	Reinforced Nylon / Reinforced Polypropylene
4c	Air & Vacuum Seal	EPDM
4d	Air Release Seal & Seat	EPDM & Reinforced Nylon
4e	Seal Cover	Reinforced Nylon
4f	Domed Nut	Stainless Steel 316
4g	Stopper	Stainless Steel 316
4h	Spring	Stainless Steel 316
4i	Float & Rod	Stainless Steel 316
5	Body Assembly	
5a	O-ring	NBR
5b	Body	Ductile Iron / Stainless Steel 316
5c	Ball Valves	Stainless Steel 316

