

D-26

PN 10/16/25



A.R.I.
 OPTIMAL FLOW SOLUTIONS

Combination Air Valve for Wastewater

Application

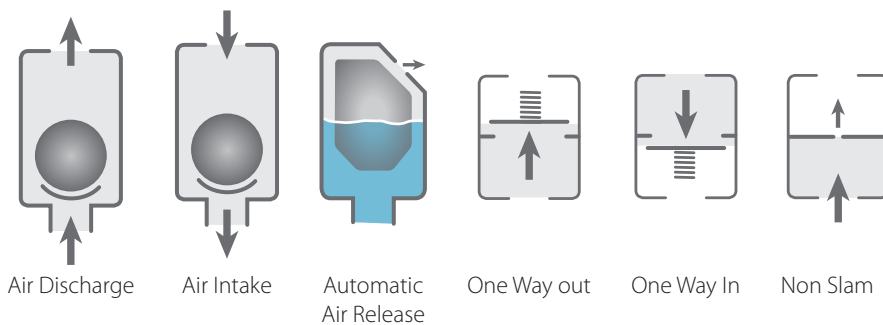
Wastewater

Description

The D-26 is a full bore combination air valve installed on a wastewater transmission system to increase pipeline efficiency and reduce energy requirements by improving the hydraulic operation of the system. A continuous air gap in the valve body separates the wastewater from the sealing mechanism.



Operation



Installation

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

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 unseal the sealing mechanism
Funnel-shaped lower body	residue matter falls back into the system pipeline
All internal parts - stainless steel 316, polymer, rubber materials	non-corrosive and durable
Spray Guard®	flow enhancer, prevents spraying from valve outlet
Ball valve	releases pressure and drains valve prior to maintenance
Flow cross-sections equal or greater than port area	maximum flow

Technical Specifications



Size range: 2" - 8"



Sealing pressure range: 2" - 8" 0.1-16 bar (PN 16)
2" 3" 0.02 -10 bar (PN 10)
3" metal 0.2 -25 bar (PN 25)
Testing pressure: 1.5 times maximum working pressure



Maximum working temperature: 60° C.
Maximum intermittent temperature: 90° C.



Valve coating: Fusion bonded epoxy coating in compliance with standard DIN 30677-2

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

Valve Selection Options

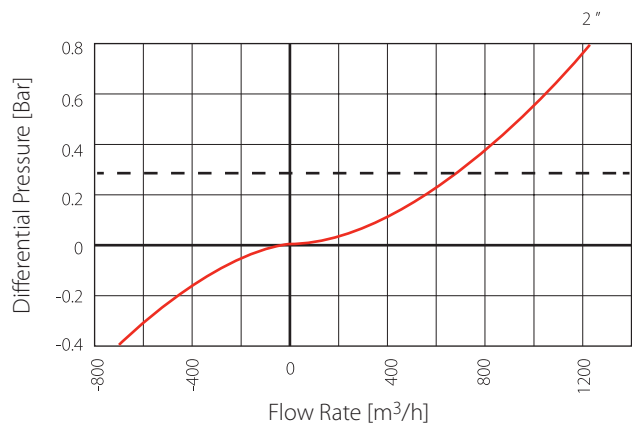
- Flanged ends to meet any requested standard
- Standard: cast ductile body, optional: stainless steel or 2" 3" reinforced nylon.
- Optional Covers (for air discharge direction and for add-on components):
2" models - two-directional cover is standard
3" models - optional one directional and two-directional cover
4" models - one-directional elbow for horizontal discharge can be removed to allow for vertical discharge
- 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

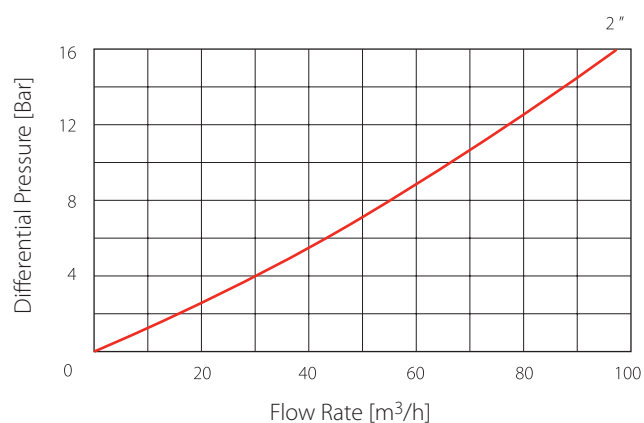
Size	Number of orifices	Discharge orifice (mm)	Total NS area (mm ²)	NS orifice (mm)	Switching point (bar)	Flow at 0.4 bar (m ³ /h)
2" (50mm)	1 orifice	50	15.9	4.5	Spring loaded normally closed	24
	2 orifices	50	31.8	6.4		31.6
	3 orifices	50	47.7	7.8		40
3" (80mm)	1 orifice	75	50.3	8	Spring loaded normally closed	38.47
	2 orifices	75	100.5	11.3		72.51
	3 orifices	75	150.8	13.9		111.38
4" (100mm)	1 orifice	100	78.5	10	Spring loaded normally closed	150
	2 orifices	100	157.1	14.1		185
	3 orifices	100	235.6	17.3		230
6" (150mm)	1 orifice with graduated closure	150	706.86	30	0.025	1580
8" (200mm)		200	1641.3	45.7	0.0025	1890

Flow Charts D-26 2"

Air & Vacuum Flow Rate

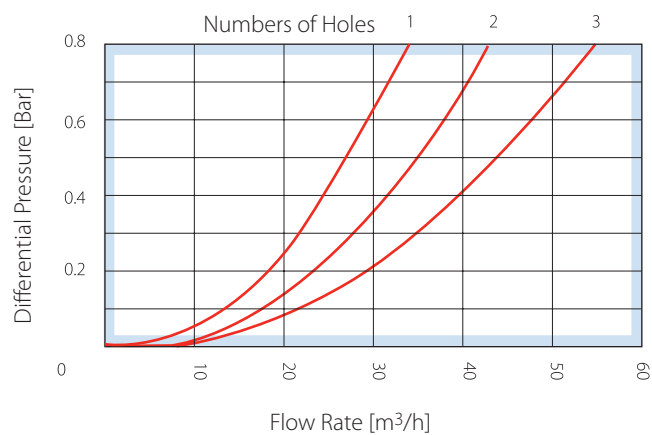
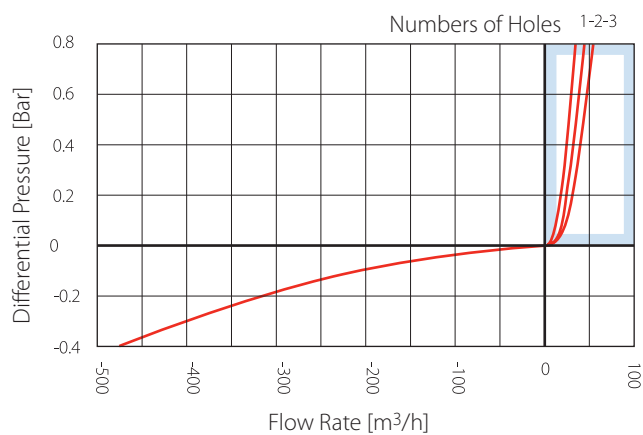


Automatic Air Release Flow Rate



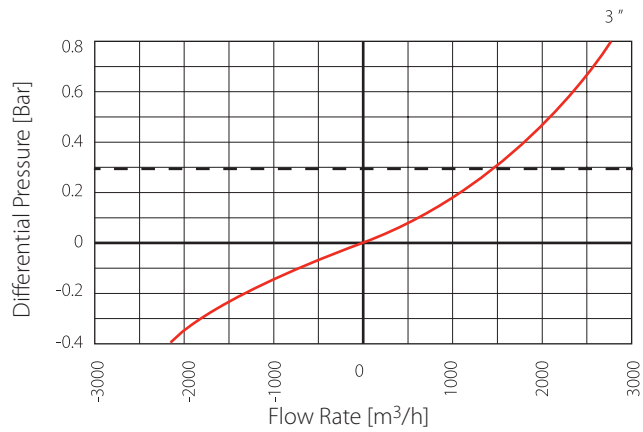
Flow Charts D-26 NS 2"

Adjustable NS Chack Valve



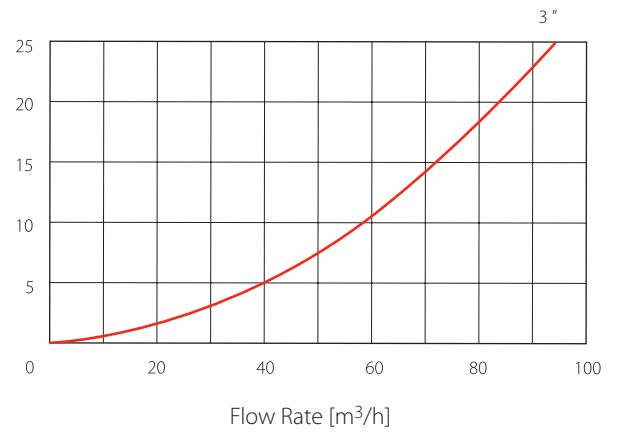
Flow Charts D-26 3"

Air & Vacuum Flow Rate



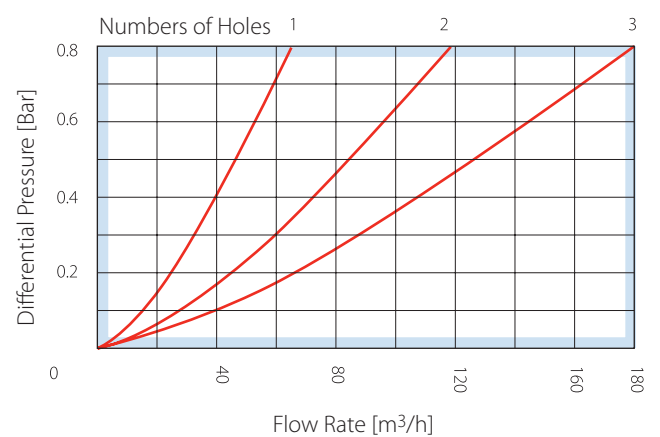
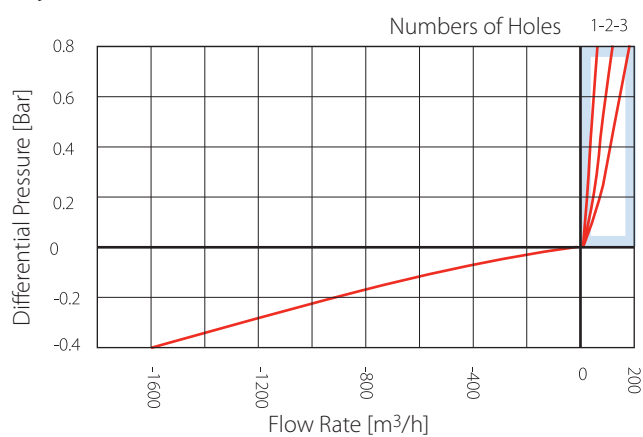
--- Max. recommended design air discharge

Automatic Air Release Flow Rate



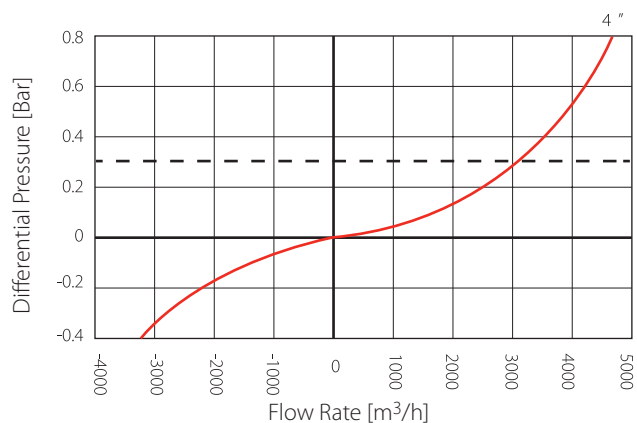
Flow Charts D-26 NS 3"

Adjustable NS Chack Valve



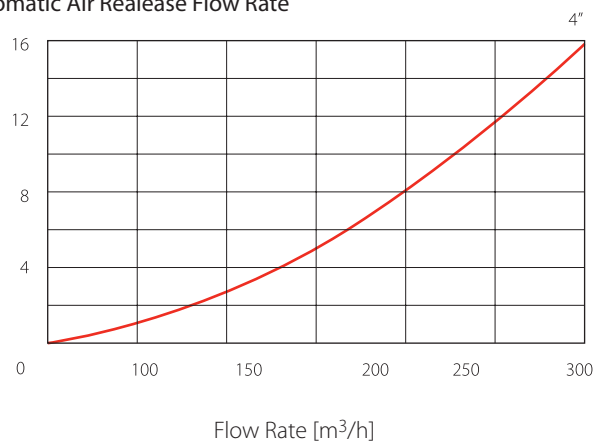
Flow Charts D-26 4"

Air & Vacuum Flow Rate



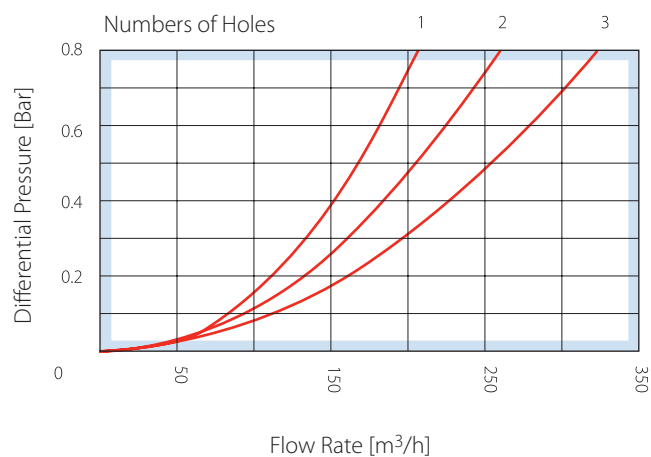
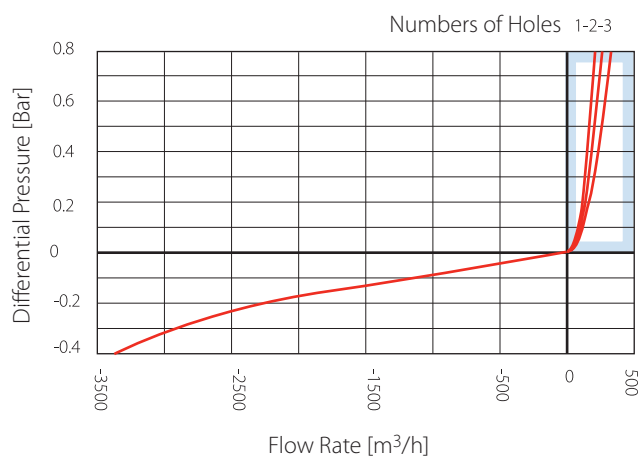
--- Max. recommended design air discharge

Automatic Air Release Flow Rate



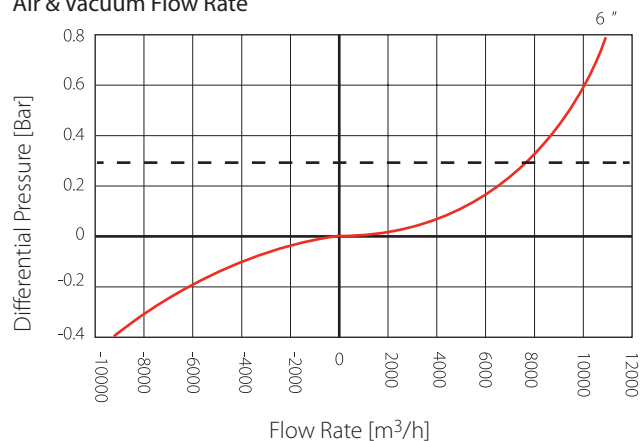
Flow Charts D-26 NS 4"

Adjustable NS Chack Valve



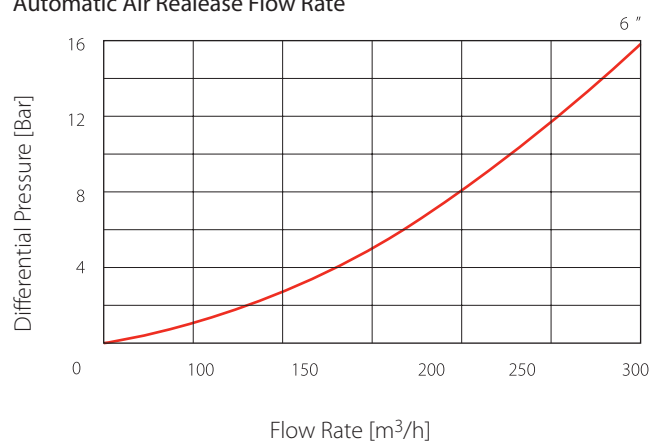
Flow Charts D-26 6"

Air & Vacuum Flow Rate



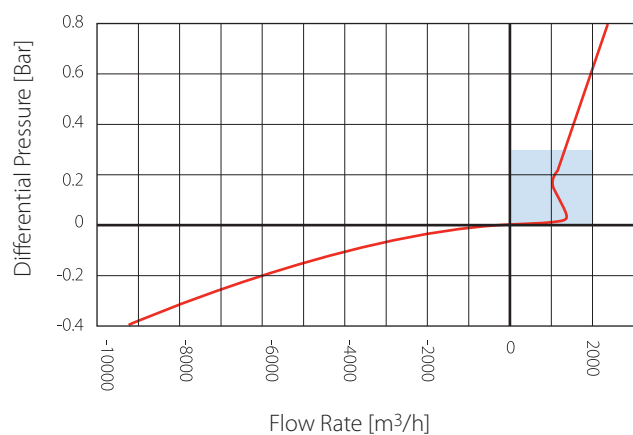
--- Max. recommended design air discharge

Automatic Air Release Flow Rate

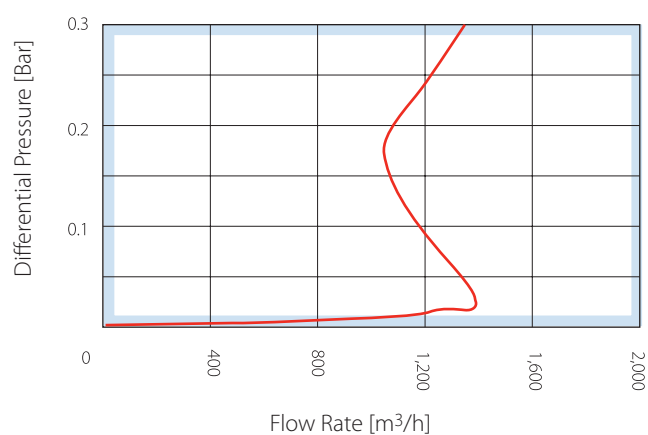


Flow Charts D-26 NS 6"

Air & Vacuum Flow Rate

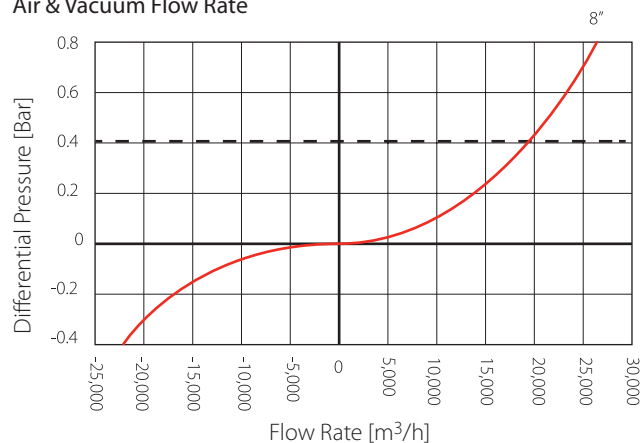


Air Discharge switching Region



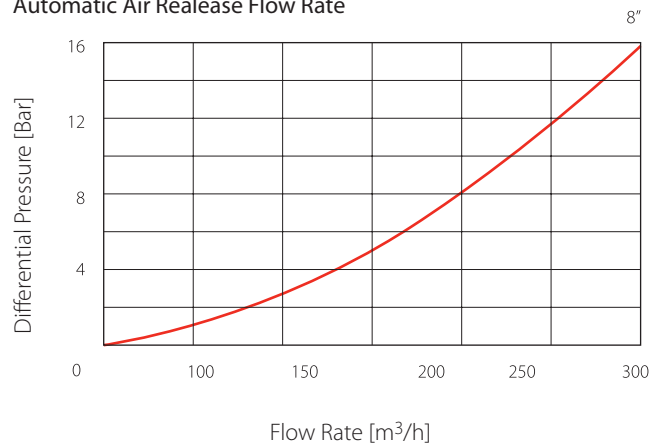
Flow Charts D-26 8"

Air & Vacuum Flow Rate



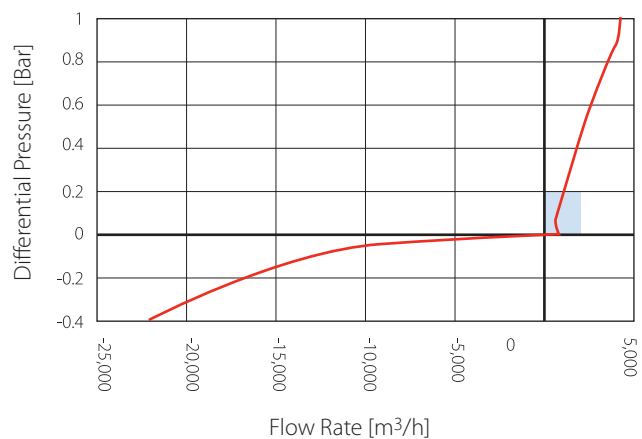
--- Max. recommended design air discharge

Automatic Air Release Flow Rate

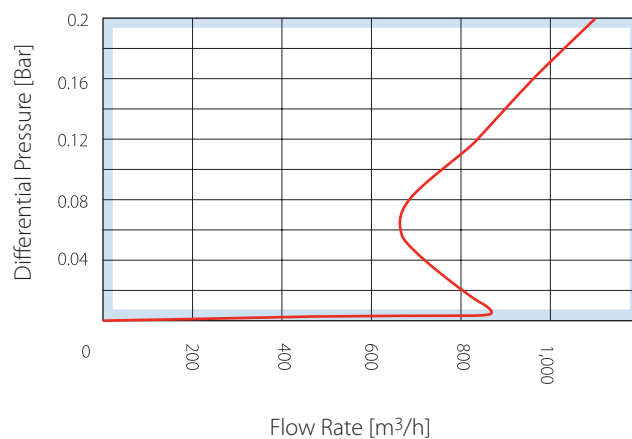


Flow Charts D-26 NS 8"

Air & Vacuum Flow Rate

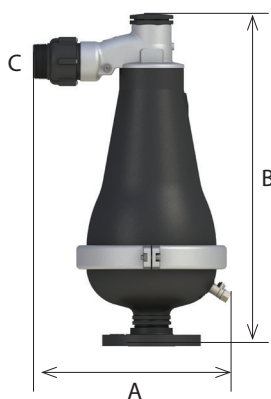


Air Discharge switching Region



D-26

PN 10/16/25



Dimensions and Weight

Model	Dimensions (mm)		Connection	Weight (kg)		Orifice Area (mm ²)	
	A	B		RN	ST ST	A / V	Auto.
D-26 2" (50 mm) THR	258	547	2" BSP / NPSM Female	8.1	13.2	1963	8.6
D-26 2" (50 mm) FL	258	554	2" BSP / NPSM Female	8.5	16.1	1963	8.6
D-26 NS 2" (50 mm) THR	330	547	2" BSP / NPSM Male	8.3	13.6	1963	8.6
D-26 NS 2" (50 mm) FL	330	554	2" BSP / NPSM Male	8.7	16.5	1963	8.6
One-directional cover				DI	ST ST		
D-26 3" (80 mm) THR	526	580	3" BSP / NPSM Female	21.0	21.6	5024	15.7
D-26 3" (80 mm) FL	526	580	3" BSP / NPSM Female	21.6	24.6	5024	15.7
D-26 NS 3" (80 mm) THR	548	580	3" BSP / NPSM Male	21.8	22.5	5024	15.7
D-26 NS 3" (80 mm) FL	548	580	3" BSP / NPSM Male	24.7	25.5	5024	15.7
Two-directional cover				DI	ST ST		
D-26 3" (80 mm) THR	495	620	3" BSP / NPSM Female	21.8	22.5	5024	15.7
D-26 3" (80 mm) FL	495	620	3" BSP / NPSM Female	24.2	25.0	5024	15.7
D-26 NS 3" (80 mm) THR	605	620	3" BSP / NPSM Male	22.7	23.4	5024	15.7
D-26 NS 3" (80 mm) FL	605	620	3" BSP / NPSM Male	24.7	25.4	5024	15.7
Two-directional cover (RN)				RN			
D-26 3" (80 mm) THR	350	613	3" BSP / NPSM Female	14.6	-	5024	15.7
D-26 3" (80 mm) FL	350	625	3" BSP / NPSM Female	15.4	-	5024	15.7
D-26 NS 3" (80 mm) THR	436	613	3" BSP / NPSM Male	15.4	-	5024	15.7
D-26 NS 3" (80 mm) FL	436	625	3" BSP / NPSM Male	16.1	-	5024	15.7
				DI	ST ST		
D-26 4" (100 mm) FL	420	830	4" Flanged BSP / NPSM F	43.6	45	7854	31.14
D-26 NS 4" (100 mm) FL	607	849	4" Flanged BSP / NPSM F	48.5	50	7854	31.14
D-26 6" (150 mm) FL	545	889	6" Flanged BSP / NPSM F	86.3	89.0	17671	31.14
D-26 NS 6" (150 mm) FL	545	1002	6" Flanged BSP / NPSM F	91.2	94.0	17671	31.14
D-26 8" (200 mm) FL	552	1197	8" Flanged BSP / NPSM F	127.2	141.5	31400	31.14
D-26 NS 8" (200 mm) FL	552	1337	8" Flanged BSP / NPSM F	140.8	151.2	31400	31.14

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 are approximate, due to the differences in flange standards, materials and variable accessories.

D-26 2" 3" PN 10/16

Parts List and Specification

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	BUNA-N
3b. Spray Guard®	Polypropylene
3c. Body	Reinforced Nylon / Stainless Steel 316
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	BUNA-N
5b. Clamp Assembly	Cast Stainless Steel + Stainless Steel 316
5c. Base	Reinforced Nylon / Stainless Steel 316
5d. Tap	Brass / Stainless Steel



Parts List and Specification

Part	Material
1. Cover Assembly	Materials
1a. Orifice Plug	Polypropylene
1b. Cover	Ductile Iron
1c. Bolt Assembly	Stainless Steel 316 + Reinforced Nylon
1d. Orifice Seat	Stainless Steel 316
1e. 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
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®	BUNA-N
4b. O-Ring	Polypropylene
4c. Body	Cast Steel / Stainless Steel 316
4d. Ball Valve	Brass, Chrome Coated / Stainless Steel 316



D-26 3" PN 16

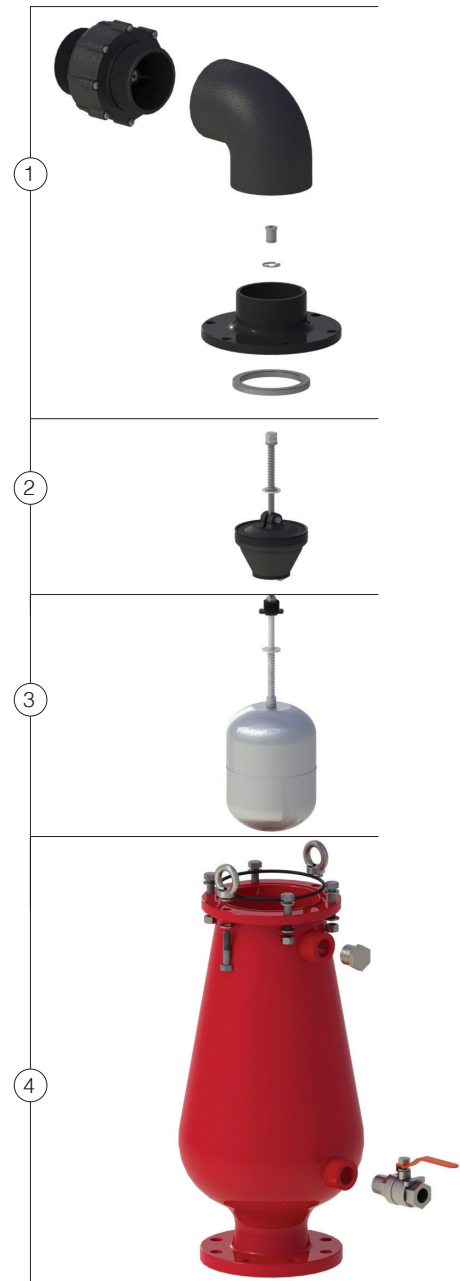
Parts List and Specification

Part	Material
1. Cover Assembly	Materials
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. O-Ring	BUNA-N
4b. Spray Guard®	Polypropylene
4c. Body	Cast Steel / Stainless Steel 316
4d. Ball Valve	Brass, Chrome Coated / Stainless Steel 316



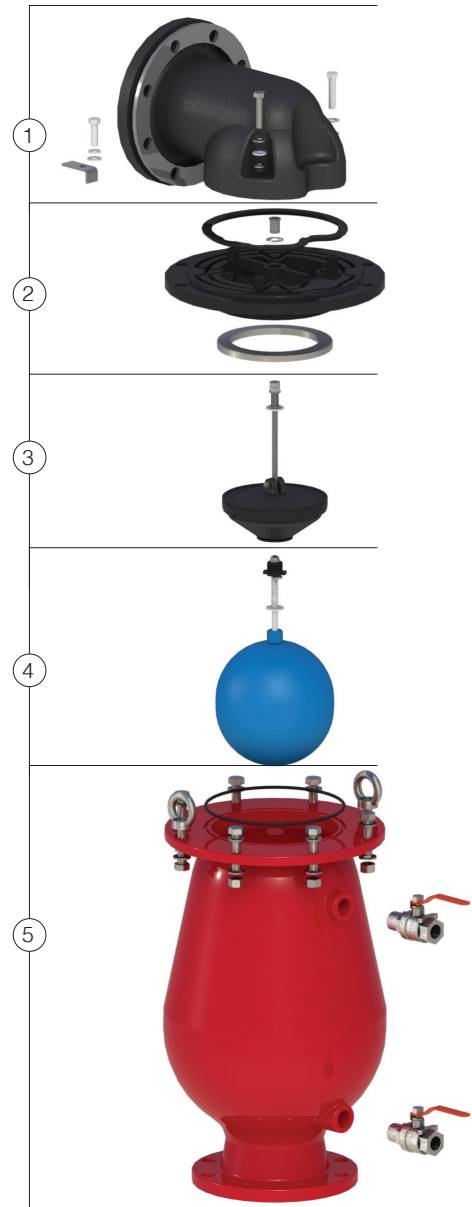
Parts List and Specification

Part	Material
1. Cover Assembly	
1a. Discharge Elbow	PVC
1b. Cover	Ductile Iron / Stainless Steel 316
1c. Orifice Seat	Stainless Steel 316
1d. Non-Slam Component (Optional)	Reinforced Nylon / Polypropylene + Stainless Steel
2. Seal Assembly	
2a. Guide Rod Assembly	Stainless Steel 316 + Acetal
2b. Air&Vacuum Disc	Cast Stainless Steel
2c. Air&Vacuum Seal	EPDM
2d. Air Release Seal & Seat	EPDM & Reinforced Nylon
2e. Seal Cover Assembly	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	Polypropylene + Stainless Steel 316
4. Body Assembly	
4a. O-Ring	BUNA-N
4b. Body	Cast Steel / Stainless Steel 316
4c. Plug	Stainless Steel 316
4d. Ball Valve	Brass, Chrome Coated / Stainless Steel 316



Parts List and Specification

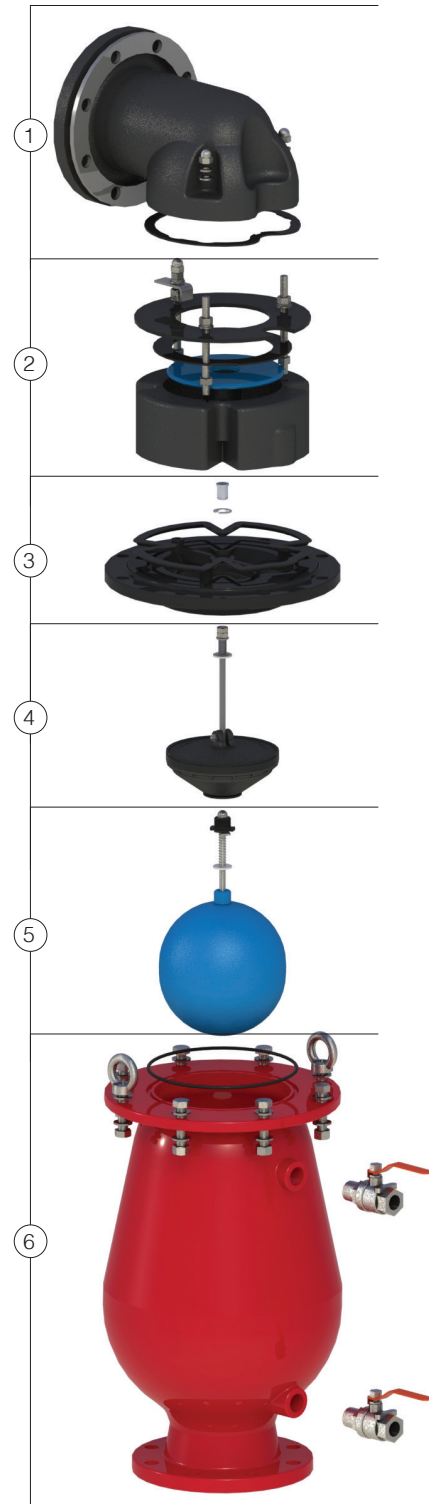
Part	Material
1. Discharge Elbow Assembly	Materials
1a. Flange Supports	Stainless Steel 316
1b. Discharge Elbow	Polyethylene
1c. Angle Support	Stainless Steel 316
2. Cover Assembly	
2a. Seal	NBR
2b. Cover	Ductile Iron / Stainless Steel 316
2c. Orifice Seat	Stainless Steel 316
3. Seal Assembly	
3a. Guide Rod Assembly	Stainless Steel 316 + Acetal
3b. Air&Vacuum Disc	Cast Stainless Steel
3c. Air&Vacuum Seal	EPDM
3d. Air Release Seal & Seat	EPDM & Reinforced Nylon
3e. Seal Cover Assembly	Reinforced Nylon
3f. Flow Enhancer	ABS
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. Body Assembly	
5a. O-Ring	BUNA-N
5b. Body	Cast Steel / Stainless Steel 316
5c. Ball Valves	Brass, Chrome Coated / Stainless Steel 316



D-26 NS 6" PN 16

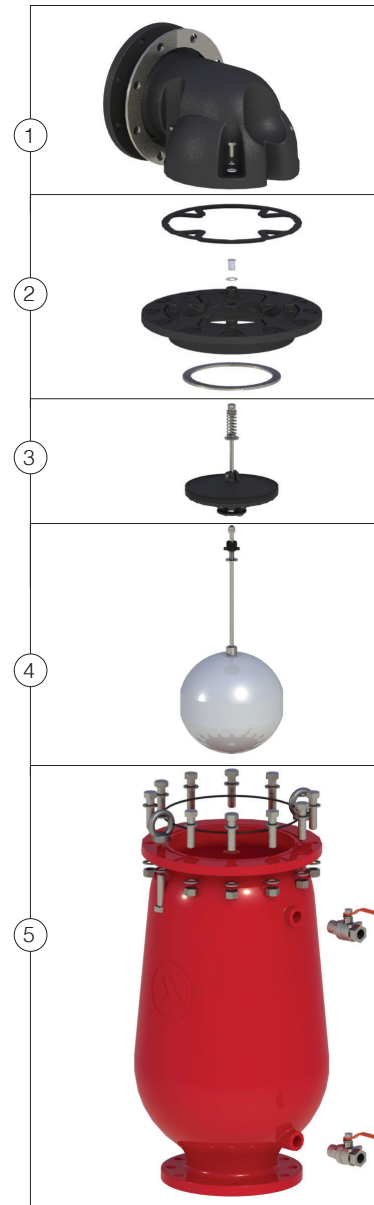
Parts List and Specification

Part	Material
1. Discharge Elbow Assembly	
1a. Flange Supports	Stainless Steel 316
1b. Discharge Elbow	Polyethylene
1c. Angle Support	Stainless Steel 316
1d. Seal	NBR
2. Non-Slam Assembly - Optional	
2a. Ring	Stainless Steel 316
2b. Ring Seal	EPDM
2c. Disc Housing	Polyethylene
2d. Non-slam Disc	Stainless Steel 316 / Ductile Iron
2e. Threaded Rods	Stainless Steel 316
3. Cover Assembly	
3a. Seal	NBR
3b. Cover	Ductile Iron / Stainless Steel 316
3c. Orifice Seat	Stainless Steel 316
4. Seal Assembly	
4a. Guide Rod Assembly	Stainless Steel 316 + Acetal
4b. Air&Vacuum Disc	Cast Stainless Steel
4c. Air&Vacuum Seal	EPDM
4d. Air Release Seal & Seat	EPDM & Reinforced Nylon
4e. Seal Cover Assembly	Reinforced Nylon
5. Float Assembly	
5a. Domed Nut	Stainless Steel 316
5b. Stopper	Polypropylene
5c. Spring	Stainless Steel 316
5d. Float & Rod	Polypropylene + Stainless Steel 316
6. Body Assembly	
6a. O-Ring	BUNA-N
6b. Body	Cast Steel / Stainless Steel 316
6c. Ball Valves	Brass, Chrome Coated / Stainless Steel 316



Parts List and Specification

Part	Material
1. Discharge Elbow Assembly	Materials
1a. Flange Supports	Stainless Steel 316
1b. Discharge Elbow	Polyethylene
1c. Angle Support	Stainless Steel 316
2. Cover Assembly	
2a. Seal	NBR
2b. Cover	Ductile Iron / Stainless Steel 316
2c. Orifice Seat	Stainless Steel 316
3. Seal Assembly	
3a. Guide Rod Assembly	Stainless Steel 316 + Acetal
3b. Air&Vacuum Disc	Cast Stainless Steel
3c. Air&Vacuum Seal	EPDM
3d. Air Release Seal & Seat	EPDM & Reinforced Nylon
3e. Seal Cover Assembly	Reinforced Nylon
3f. Flow Enhancer	ABS
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. Body Assembly	
5a. O-Ring	BUNA-N
5b. Body	Cast Steel / Stainless Steel 316
5c. Ball Valves	Brass, Chrome Coated / Stainless Steel 316



Parts List and Specification

Part	Material
1. Discharge Elbow Assembly	
1a. Flange Supports	Stainless Steel 316
1b. Discharge Elbow	Polyethylene
1c. Angle Support	Stainless Steel 316
2. Non-Slam Assembly - Optional	
2a. Ring	Stainless Steel 316
2b. Ring Seal	EPDM
2c. Disc Housing	Polyethylene
2d. Non-slam Disc	Stainless Steel 316 / Ductile Iron
2e. Threaded Rods	Stainless Steel 316
3. Cover Assembly	
3a. Seal	NBR
3b. Cover	Ductile Iron / Stainless Steel 316
3c. Orifice Seat	Stainless Steel 316
4. Seal Assembly	
4a. Guide Rod Assembly	Stainless Steel 316 + Acetal
4b. Air&Vacuum Disc	Cast Stainless Steel
4c. Air&Vacuum Seal	EPDM
4d. Air Release Seal & Seat	EPDM & Reinforced Nylon
4e. Seal Cover Assembly	Reinforced Nylon
5. Float Assembly	
5a. Domed Nut	Stainless Steel 316
5b. Stopper	Polypropylene
5c. Spring	Stainless Steel 316
5d. Float & Rod	Polypropylene + Stainless Steel 316
6. Body Assembly	
6a. O-Ring	BUNA-N
6b. Body	Cast Steel / Stainless Steel 316
6c. Ball Valves	Brass, Chrome Coated / Stainless Steel 316

