

DOUBLE ORIFICE NON-SLAM (KINETIC) ARV FAF 7340



Features

- Double Orifice Non-Slam Kinetic ARV to be used for the purpose of vacuuming air into the pipe during emptying the pipeline due to maintenance or failure circumstances. In addition, to release small air particulates that may occur time to time during operation.
- Double Orifice Non-Slam Kinetic ARV is installed to the pipe with a flanged connection.
- One of the most important feature of Double Orifice Kinetic ARV compared to conventional type of Double Orifice ARV is that air outlet diameter has the same size with inlet diameter.
- Double Orifice Kinetic ARV's are known as four function ARV's; air release, air vacuum, prevent blocking due to sudden closure and releasing air under pressure with the help of the second orifice.
- Eliminates the problem of early closure.
- Provides a big advantage during installation and operation with its single body design and low weight.
- High resistant float parts made of PP (Polipropilen) eliminates the negative effects of deformation and abrasion.
- Ductile Iron Body, flanged connection according to EN 1092-2. Float part made of polyethylene which can be replaced easily.
- Body and cover of ductile iron with blue epoxy coating.
- Release valves can be manufactured with flanged or screwed ends.
- Working pressure range: 0.2 – 25 bar.

Temperature

- +70 °C

PRODUCTION STANDARTS

DN50 → DN300
PN 10-16-25

Design	EN 1074-4
End Connection	EN 1092-2 / ISO 7005-2
Marking	EN 19
Tests	EN 12266
Corrosion Protection	Industrial Epoxy

Product Description

FAF7340 Double Orifice Non-Slam Kinetic ARV; to be used for the purpose of releasing the existing air in the potable water transmission lines and water networks after installation or during emptying and refilling the pipeline due to maintenance works.

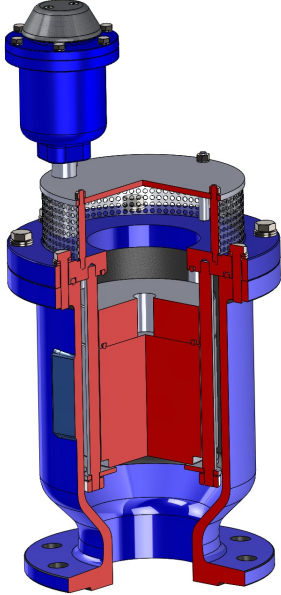
Accessories

- Gate valve, FAF6000
- Butterfly valve, FAF3500-3600
- Flange adaptor, FAF3960

Scope of Application

- Pump suction lines
- Water lines
- Water supply network
- Line valves
- Venturimeters
- Plunger & turbine pumps

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PRODUCTS MODEL CODES

FAF7310	SINGLE ORIFICE ARV
FAF7320	DOUBLE ORIFICE ARV
FAF7330	NON-SLAM DYNAMIC ARV
FAF7340	DOUBLE ORIFICE NON-SLAM (Kinetic) ARV
FAF7350	COMBINATION (Underground -Street) ARV

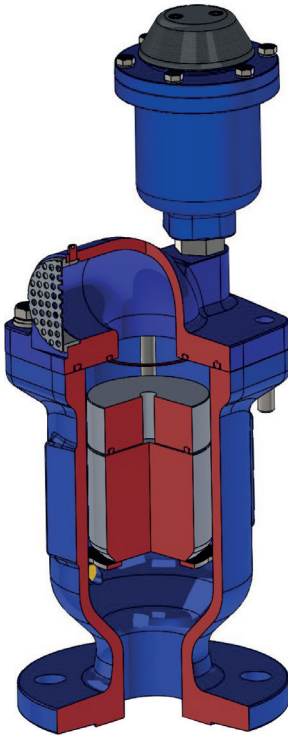
VALVE TEST PRESSURE (Bar)

MAX. OPERATING PRESSURE	BODY / SHELL TEST	SEAT TEST
10	15	11
16	24	17,6
25	37,5	27,5

Vanaların % 100'ü FAF tesislerinde hidrostatik testlere tabi tutulur.

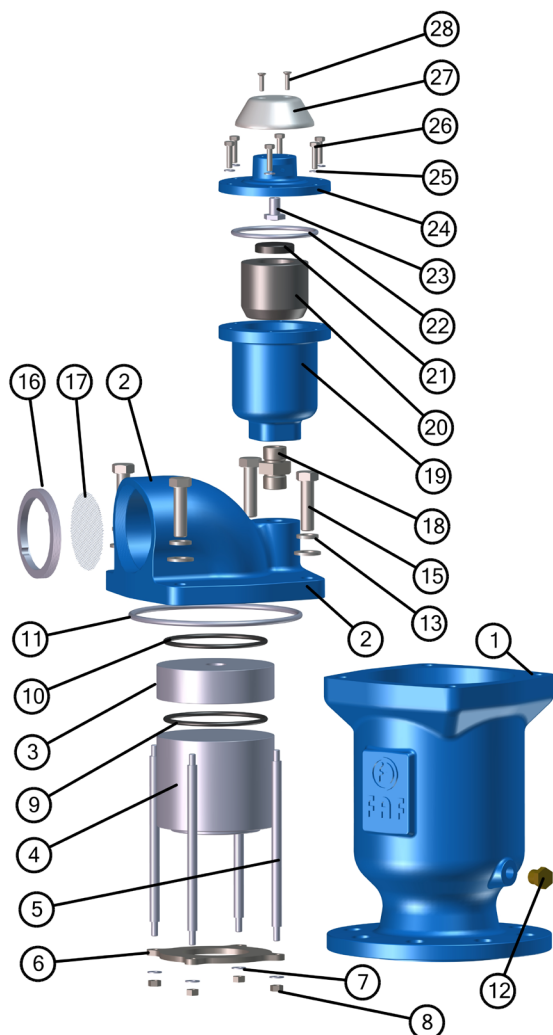
Note

- For proper use and safety precautions please follow the installation and operating instructions.



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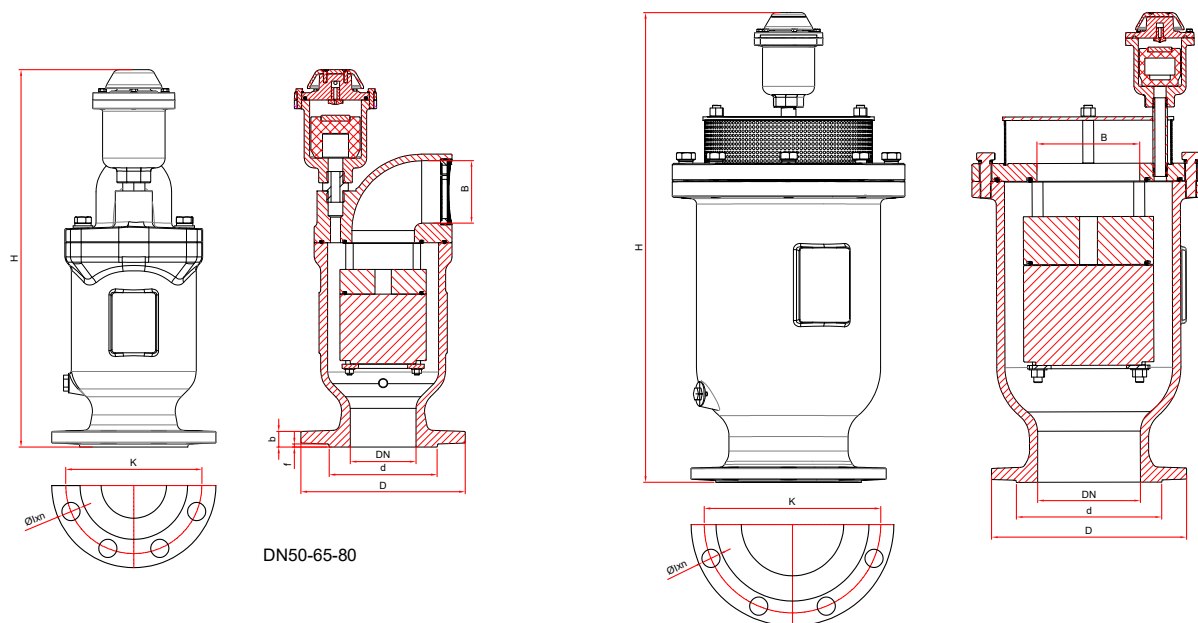
Material List



NO	ITEM	MATERIALS
1	BODY	EN GJS 500
2	BONNET	EN GJS 500
3	UPPER FLOAT	PP (Polipropilen)
4	LOWER FLOAT	PP (Polipropilen)
5	STUD	AISI304
6	FLANGE	AISI430
7	WASHER	AISI304
8	NUT	AISI304
9	O-RING	NBR - EPDM
10	O-RING	NBR - EPDM
11	O-RING	NBR - EPDM
12	NUT	BRASS
13	WASHER	AISI304
14	WASHER	AISI304
15	BOLT	AISI304
16	FILTER RING	AISI420
17	FILTER	AISI304
18	NIPPLE	AISI304
19	DN25 ARV BODY	EN GJS 500
20	DN25 ARV FLOAT	PP (Polipropilen)
21	SEALING	NBR - EPDM
22	O-RING	NBR - EPDM
23	ORIFICE	AISI420
24	DN25 ARV BONNET	EN GJS 500
25	WASHER	AISI304
26	BOLT	AISI304
27	COVER	PLASTIC
28	BOLT	ISO 10642

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Technical Details & Drawing, Dimensions



DN50-65-80

DIMENSIONS PN10

DN (mm)	D	K	d	ØI x n	f	b	H	B
50	165	125	99	19x4	3	19	430	50
65	185	145	118	19x4	3	19	440	65
80	200	160	132	19x8	3	19	460	80
100	220	180	156	19x8	3	19	512	100
150	285	240	211	23x8	3	19	685	150
200	340	295	266	23x8	4	20	775	200
250	400	350	319	23x12	4	22	811	250
300	455	400	370	23x12	4	24,5	811	250

DN300 Reduction Type

DIMENSIONS PN16

DN (mm)	D	K	d	ØI x n	f	b	H	B
50	165	125	99	19x4	3	19	430	50
65	185	145	118	19x4	3	19	440	65
80	200	160	132	19x8	3	19	460	80
100	220	180	156	19x8	3	19	512	100
150	285	240	211	23x8	3	19	685	150
200	340	295	266	23x12	4	20	775	200
250	400	355	319	28x12	4	22	811	250
300	455	410	370	28x12	4	24,5	811	250

DN300 Reduction Type

DIMENSIONS PN25

DN (mm)	D	K	d	ØI x n	f	b	H	B
50	165	125	99	19x4	3	19	430	50
65	185	145	118	19x8	3	19	440	65
80	200	160	132	19x8	3	19	460	80
100	235	190	156	23x8	3	19	512	100
150	300	250	211	28x8	3	20	685	150
200	360	310	274	28x12	4	22	775	200
250	425	370	330	31x12	4	24,5	811	250
300	485	430	389	31x16	4	25	811	250

DN300 Reduction Type

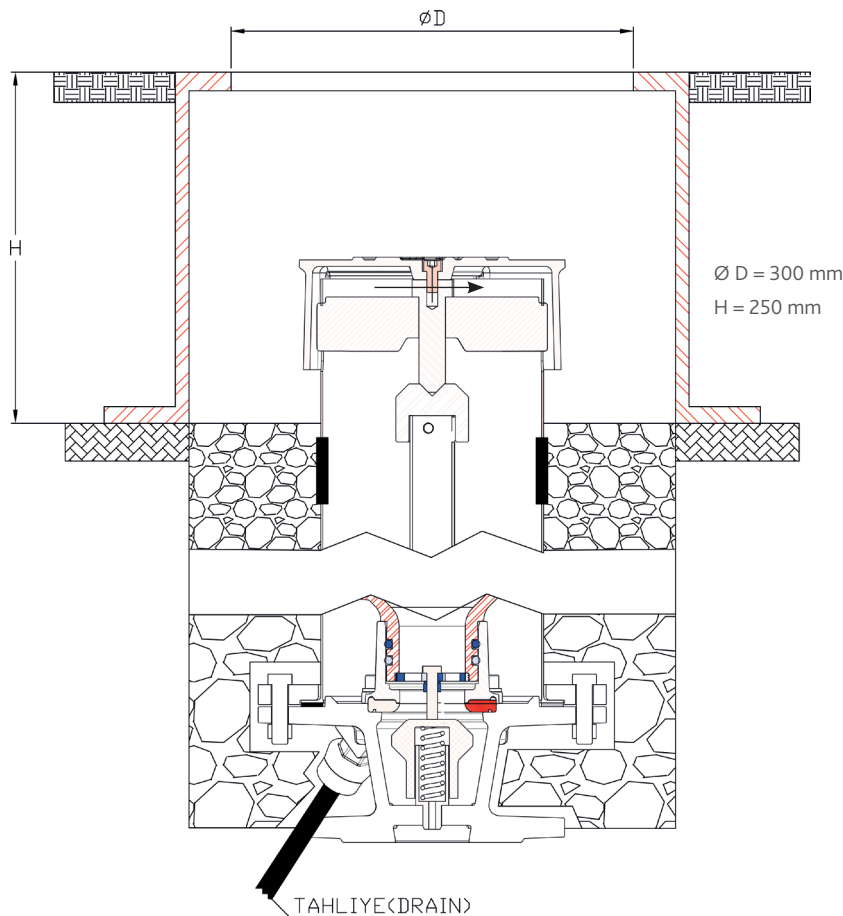
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Combination (Underground-Street) ARV Installation

- Combination ARV's are type air release valves used by buried underground, releasing the air inside the pipe and vacuuming the air to the pipe, at the water networks where pipe bursts occur, to prevent the deformation of pipes, to prevent the water leakages or losses where insufficient or water service shortage problems even the water criterias are appropriate.
- For installation, install the flanged spigot or flanged clamp to the main pipe firmly. If you are going to install flanged spigot, be sure it is welded properly to prevent any deficiency which would cause leakage or vacuum.
- With the flanged clamp installation, the important points are to be sure sealing are not misaligned and clamp is well tightened.
- After finishing the installation of spool and clamp, place your gasket on the flange and place the ARV on the flange, place the bolts&nuts and tighten them firmly. Then, place an extension pipe with a length of 1-1,5mt. to the discharge entrance located under the ARV, spread some pebblestone to the level of the open-end side of the pipe and fill carefully upto the level above the ARV's plastic cover. Surface box height should be 250mm. After arranging the distance from the surface, place the surface box with a zero level to the ground, fill the ground part with concrete to fix. You can continue completing your filling, after finishing this process.

Type of Installation

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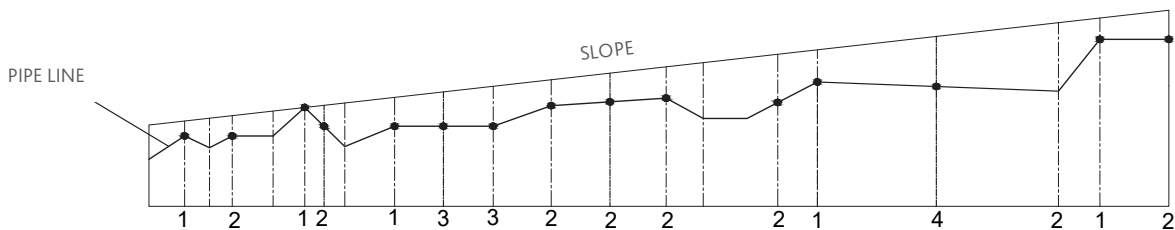
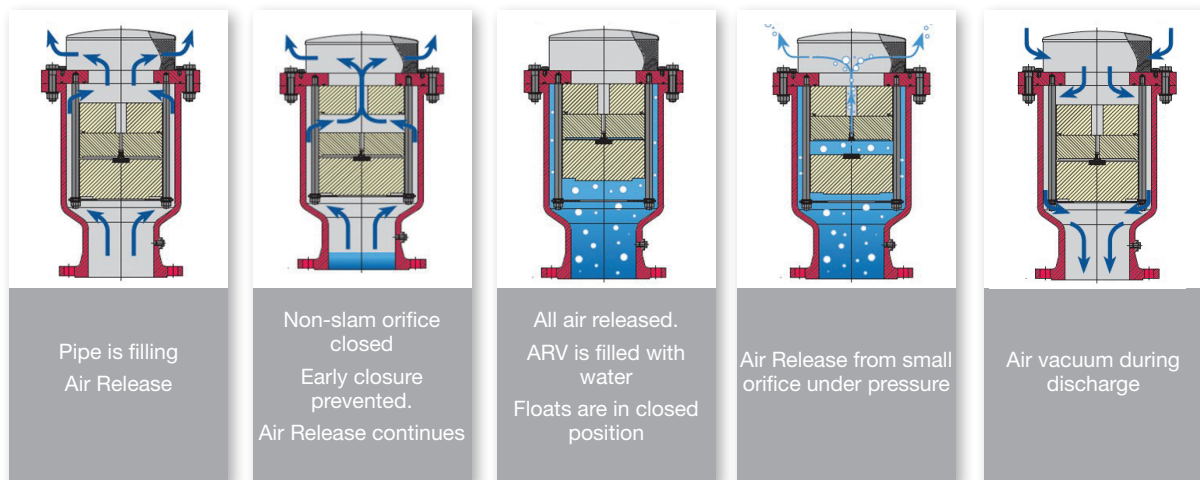
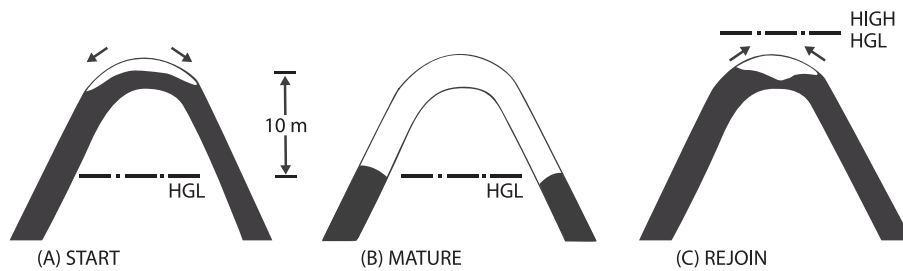
General Information about ARV's

Air vacuum and release is vital for the pipeline operation and safety. Many problems faced with the pipelines are actually related with the air left inside the pipe that cannot be released. Where does the air in the pipeline come from?

- Pipeline is already filled with air before filling with water.
- There exists 2% dissolved air in the water, which can vaporise by temperature change or pressure drop.
- Each pump absorbs a certain amount of air.
- Incorrect installations.

Effects of Air

- Air in the pipeline, narrows the filled water section and increases operating costs.
- Sometimes trapped air can stop the entire flow, depending on the nature of the pump



ARV Placement Position Suggestions ARV Application

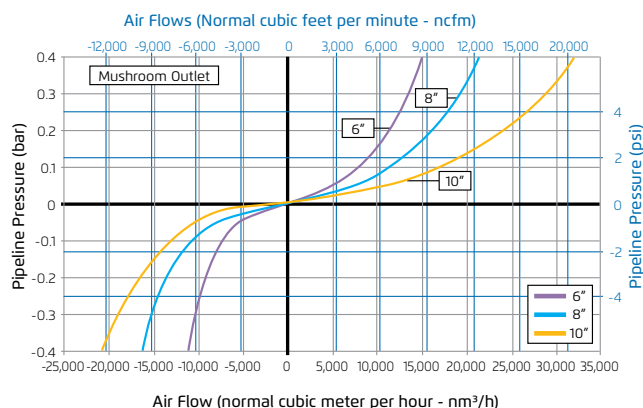
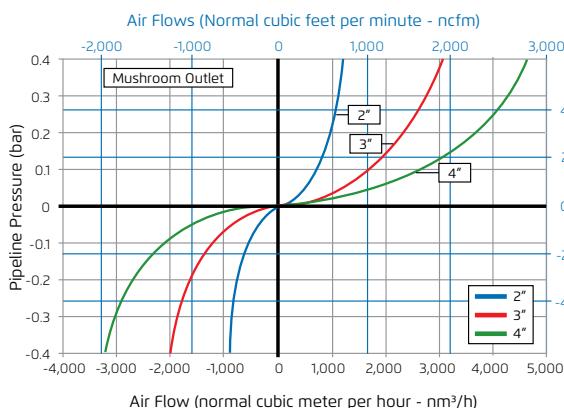
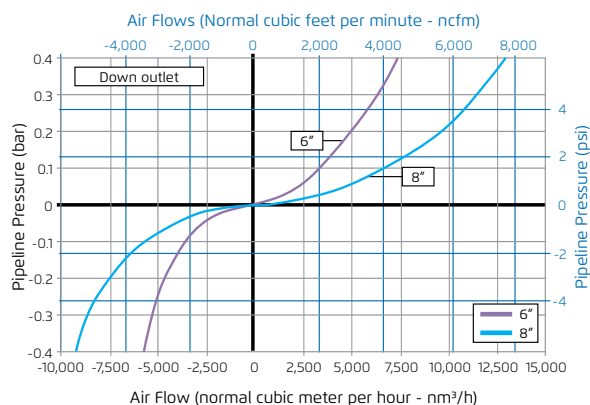
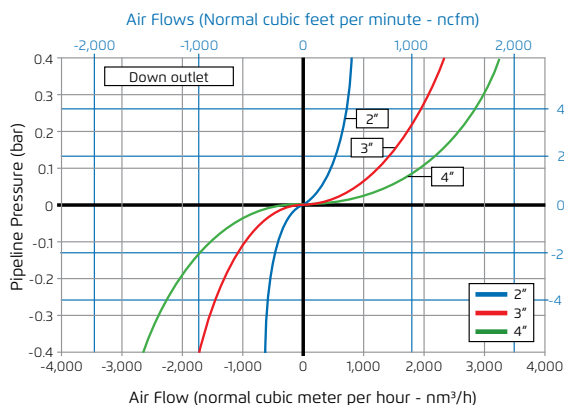
1. Full peak points
2. Incase of increase in downward slope or decrease in upward slope.
3. At every 600 to 1000 mt. at long linear pipelines
4. At long sloping lines, maximum at every 600 mt.
5. At every 400-500 mt in water networks.

ARV placement interval alternative to Item 3 and 4; can be taken as PIPELINE DIAMETER DN (mm) X 1 (mt).

(DN1000 mm X 1mt. = 1000 mt)

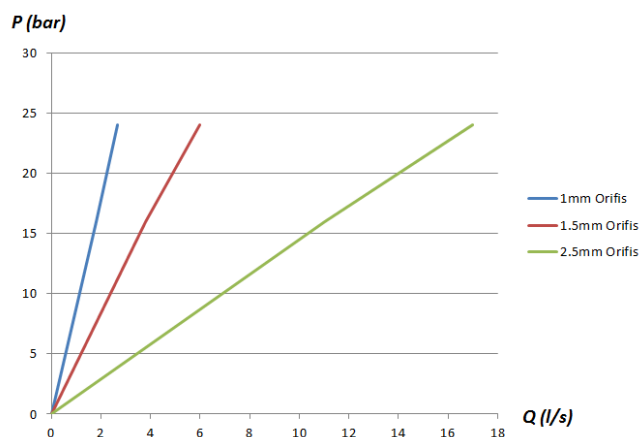
General Information about ARV's

ARV Selection Criteria



SUCTION DIMENSIONS ACCORDING TO PIPE DIAMETER	
Pipe Inner Diameter-mm	ARV-DN
65-150	50
200-250	65
300-400	80
450-600	100
700-900	150
1000-1200	200
1400-1600	250
1800-2000	300

ORIFICE SELECTION	
ARV Size	Orifice Size
DN50	1mm
DN65	1mm
DN80	1.5mm
DN100	1.5mm
DN150	1.5mm
DN200	2.5mm
DN250	2.5mm
DN300	2.5mm



ARV Factory Acceptance Test Requirements

1. Resistance Test
2. Hydrostatic Test
3. Low Pressure Sealing Test
4. Air Release
5. Air Release under pressure
6. Vacuum tests