ŌMEAX

Specialist in industrial valves

Air valve

Eurus

Presentation

Advantages

Triple-function combined air valve: air discharge, air intake, and automatic air venting.

• Single chamber with optimized design for better air flow.
• Ductile iron body with full passage, stainless steel cap, precise float guidance, maximum admissible pressure of 40 bar.
• Air flow calculations for optimal intake or discharge. Tangential drainage for quick and complete emptying.
• Cylindrical floats performing high-flow functions and maintaining pressure during operation.
• Float replacement can be easily carried out through the cap.
• Stainless steel plate beneath the float to eliminate the impact of surges or water hammer on the floats.
• Adaptable and interchangeable stainless steel nozzle according to the valve model.
• Standard stainless steel protection grid to prevent the entry of foreign objects (insects, etc.). Optional umbrella-shaped ventilation grid.

Specifications

Design and technical data

DN mm	DN 50 - DN 300
DN inch	2 - 12 "
Temperature	0°C to 70°C
Type of body	Flanged
Application	• Water distribution networks. • Irrigation or fire systems. • Used at high points on slope changes in pipelines.
Flange	PN10, PN16, PN25, PN40
Flange standard	BS EN1092-2 PN10-16-25-40 ANSI Class 125-150-250
Design and Test Standard	EN-1074/4* AWWA C-512
Pressure	Minimum 0.2 bar (lower on request) - maximum 40 bar
Option	Customized changes on the flanges and painting on request.

* Resistance and tightness of the body (1.5 x allowable operating pressure), Tightness of the seat, (1.1 x allowable operating pressure)
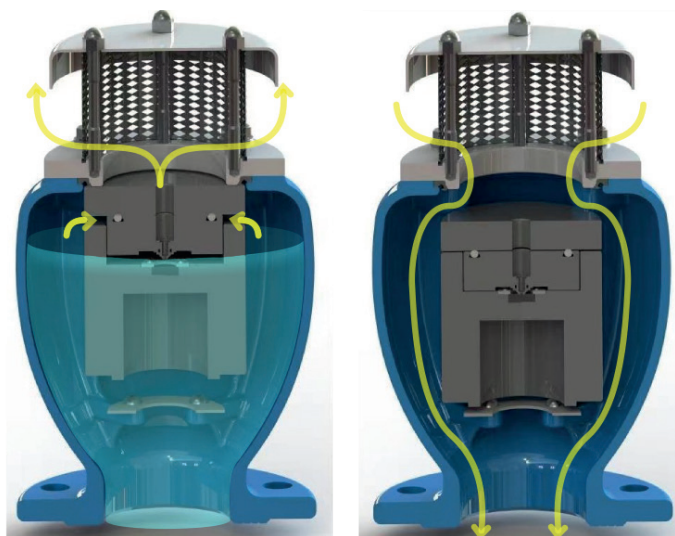
ŌMEAX - Air Valve - Eurus

4-function air valve
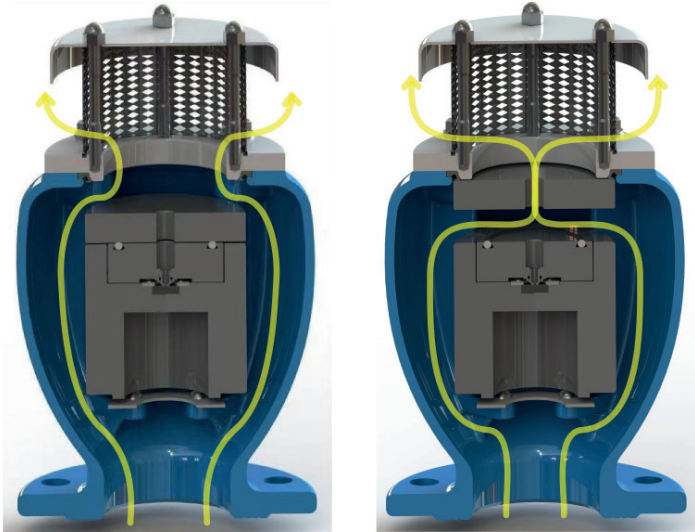
► Regulated Outflow:

During pipe filling, if the differential air pressure surpasses a specific threshold without control, there is a potential risk of water hammer and system damage. In such a scenario, the PP top float will automatically rise, diminishing the outflow and consequently slowing down the velocity of the advancing water column.
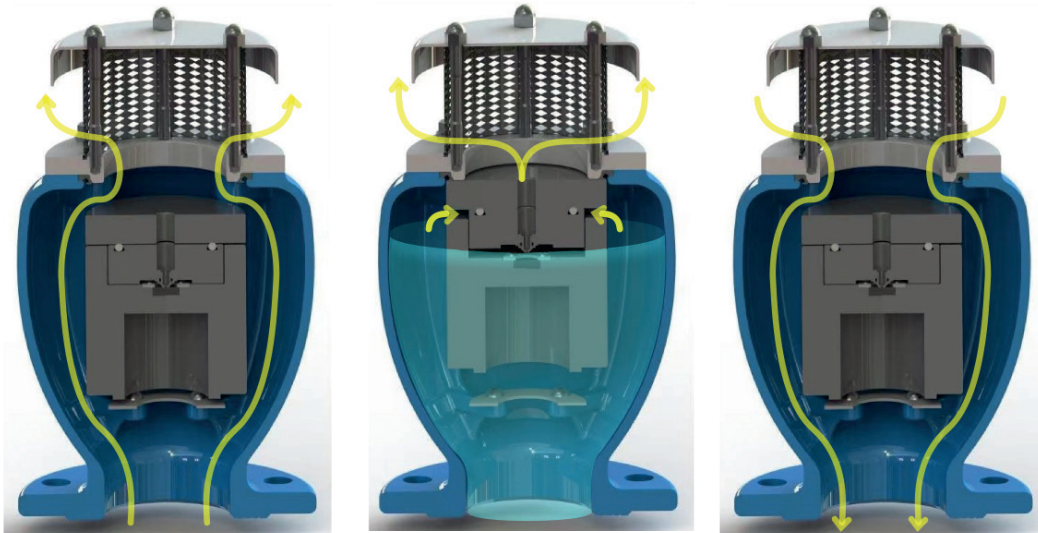
▼ Large volume air discharge:

When filling the pipe, it's essential to release air while water enters. The A400 and A400X equipped with an aerodynamic full-port body and deflector, ensures the prevention premature closures of the mobile block during this phase.

Air Release in Operational Conditions: ◄

While in operation, the air generated by the pipeline accumulates in the upper section of the air valve. Gradually, it undergoes compression, and the pressure reaches the water pressure level. Consequently, its volume expands, pushing the water level downward and facilitating the release of air through the nozzle.down the velocity of the advancing water column.

▼ Inflow of Significant Air Volume:

During pipeline drainage or pipe bursts, it is essential to introduce an equivalent amount of air as the outflowing water to prevent negative pressure and potential serious damage to the pipeline and the entire system.

3-function air valve

Large volume air discharge:

When filling the pipe, it's essential to release air while water enters. The A300 and A300X equipped with an aerodynamic full-port body and deflector, ensures the prevention premature closures of the mobile block during this phase.

Air Release in Operational Conditions:

While in operation, the air generated by the pipeline accumulates in the upper section of the air valve. Gradually, it undergoes compression, and the pressure reaches the water pressure level. Consequently, its volume expands, pushing the water level downward and facilitating the release of air through the nozzle.down the velocity of the advancing water column.

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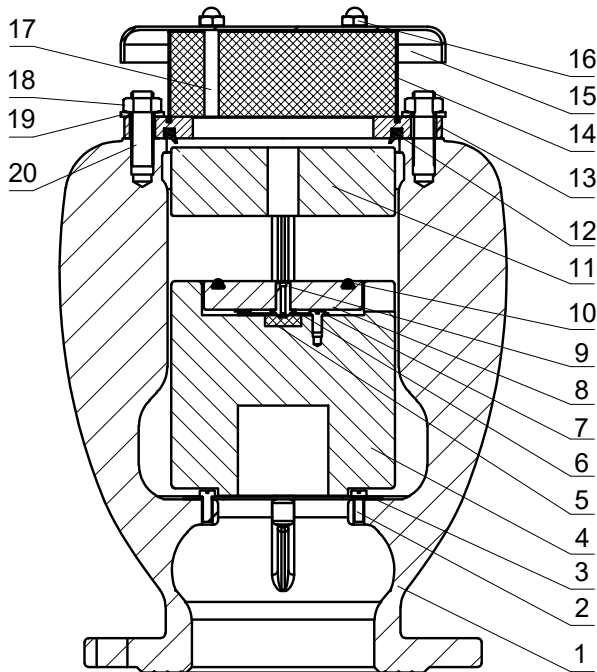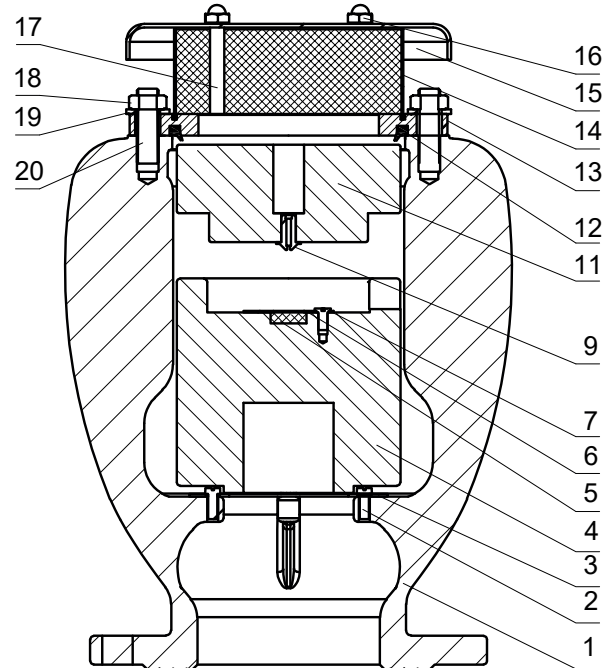
Type of main valve body

Ductile iron

Stainless steel

Part list

4F3F

3F2F

Item	Part name	No.	4F3	3F2	Remarks
01	Valve body	1	CF8	CF8M	
02	Screw	1	A2	A4	
03	Plate Ring	1	SS304	SS316	
04	Lower float	1	PP	PP	
05	Seal	1	FKM	FKM	
06	Seal retainer	1	SS304	SS316	
07	Screw	1	A2	A4	
08	Middle float	1	PP	PP	For 4F3F model only
09	Nozzle	1	SS304	SS316	
10	Oring	1	FKM	FKM	For 4F3F model only
11	Top float	1	PP	PP	
12	Seal ring	1	FKM	FKM	
13	Top flange	1	SS304	SS316	
14	Screen	1	SS304	SS316	
15	Cap	1	SS304	SS316	
16	Screw	1	A2	A4	
17	Bolt	1	A2	A4	
18	Nut	1	A2	A4	
19	Washer	1	A2	A4	
20	Bolt	1	A2	A4	

Overall dimension

4F3F
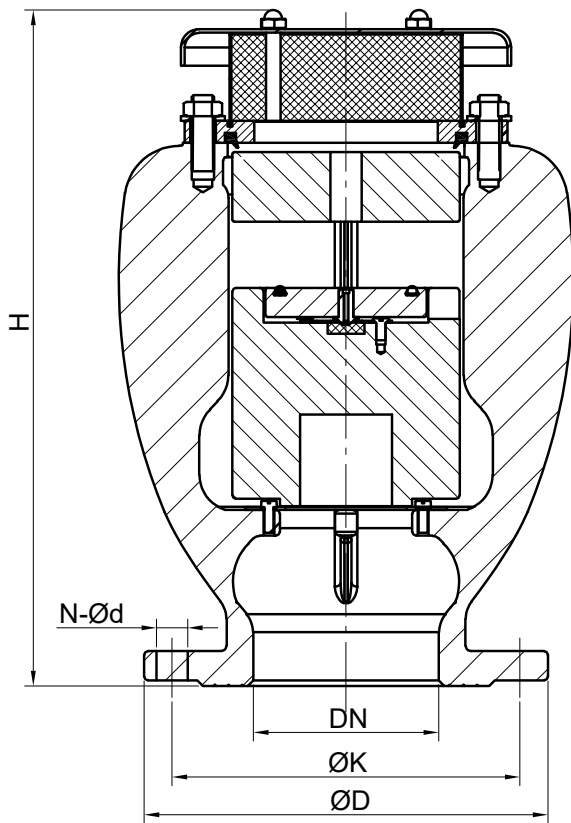
3F2F
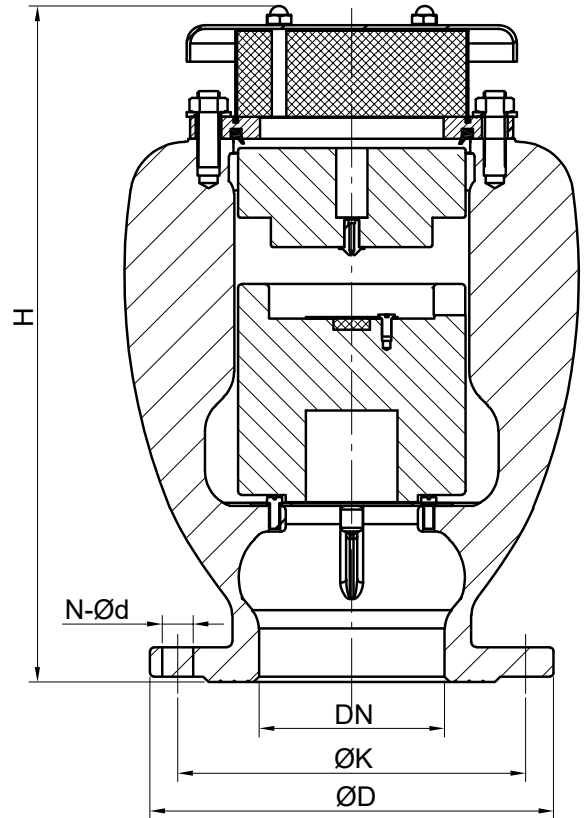
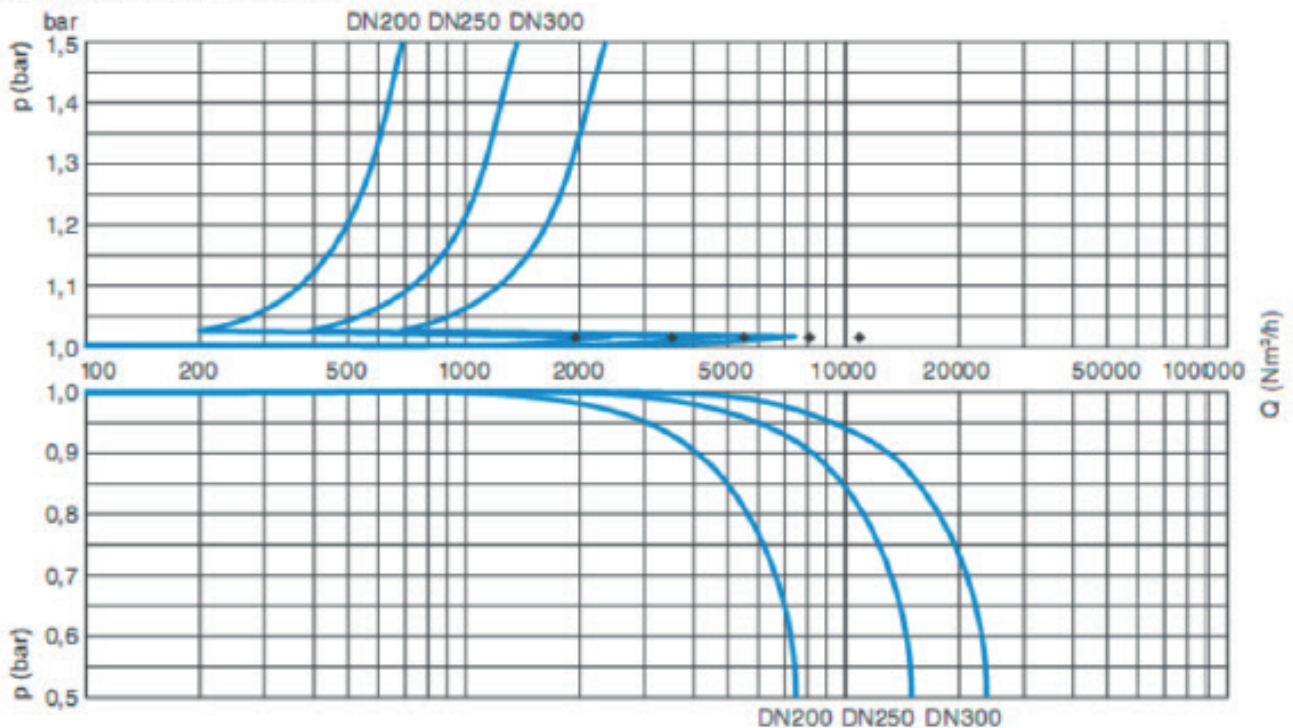| DN	ØD (mm)				ØK (mm)				N-Ød (mm)				Full Bore		Reduced Bore	
	PN10	PN16	PN25	PN40	PN10	PN16	PN25	PN40	PN10	PN16	PN25	PN40	H (mm)	Weight (kg)	H (mm)	Weight (kg)
50	165				Ø125				Ø4-19				220	14	-	-
80	200				Ø160				Ø8-19				300	25	220	16
100	220		235		Ø180		Ø190		Ø8-19		8-Ø23		370	33	300	27
150	285		300		Ø240		Ø250		Ø8-23		8-Ø28		520	68	370	38
200	340		360	375	Ø295		Ø310	Ø320	8-Ø23	12-Ø23	12-Ø28	12-Ø31	650	125	520	74
250	395	405	425	450	Ø350	Ø355	Ø370	Ø385	12-Ø23	12-Ø28	12-Ø31	12-Ø34	800	180	650	135
300	445	460	485	515	Ø400	Ø410	Ø430	Ø450	12-Ø23	12-Ø28	16-Ø34	16-Ø34	980	280	800	200

Air performance

AIR DISCHARGE DURING PIPE FILLING
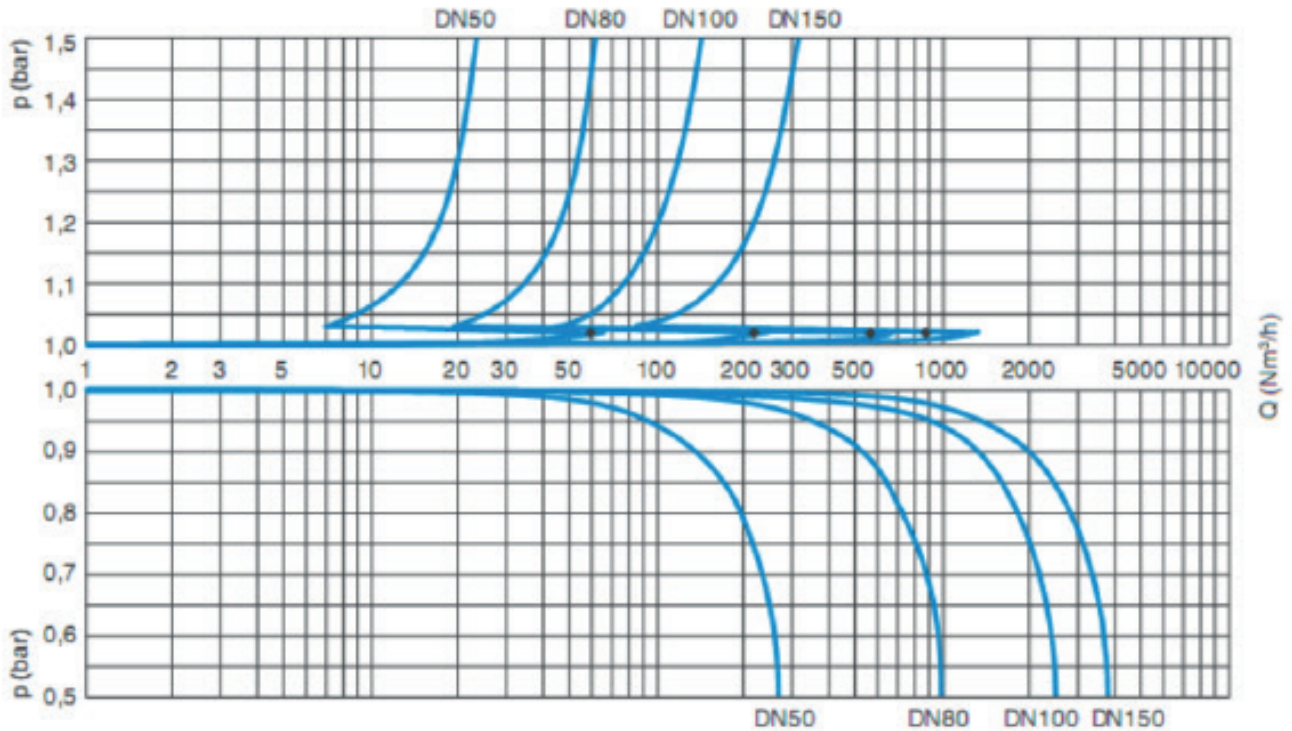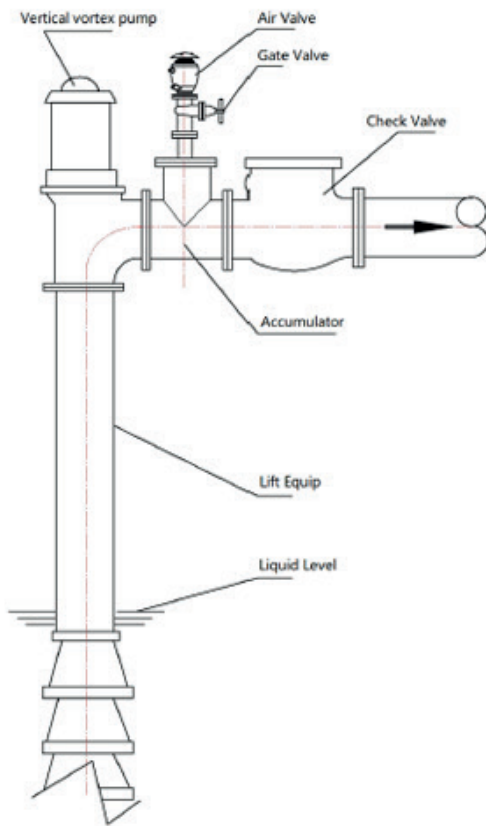

AIR ENTRANCE DURING PIPE DRAINING
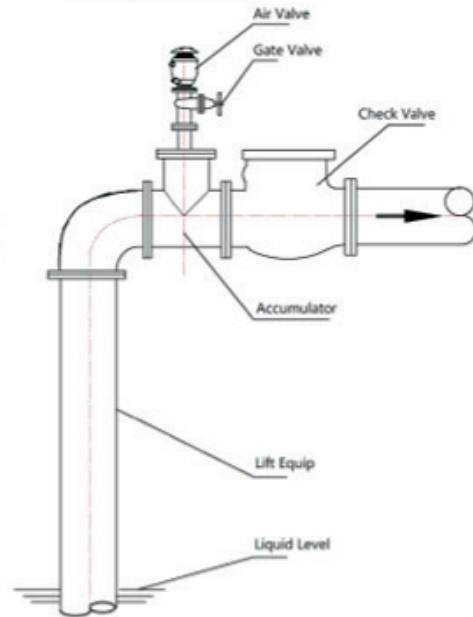
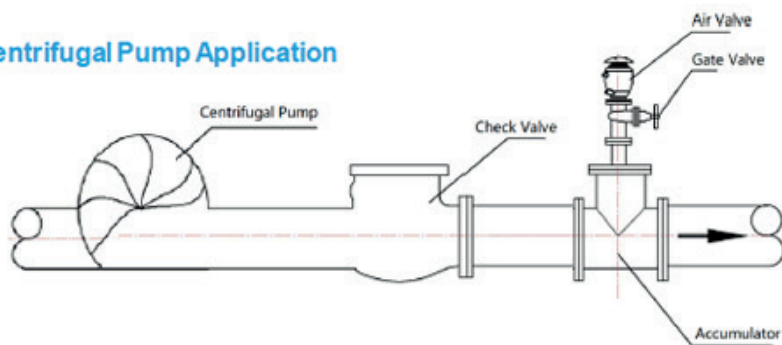AIR DISCHARGE DURING PIPE FILLING

AIR ENTRANCE DURING PIPE DRAINING

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www.omeax.com - version 1

Installation

Vertical Vortex Pump Application

- Vertical vortex pump
- Air Valve
- Gate Valve
- Check Valve
- Accumulator
- Lift Equip
- Liquid Level

Well Application

- Air Valve
- Gate Valve
- Check Valve
- Accumulator
- Lift Equip
- Liquid Level

Centrifugal Pump Application

- Centrifugal Pump
- Air Valve
- Gate Valve
- Check Valve
- Accumulator

Application in a Network

- Pump
- OCA
- Pump valve
- Air valve
- Air valve
- Check valve
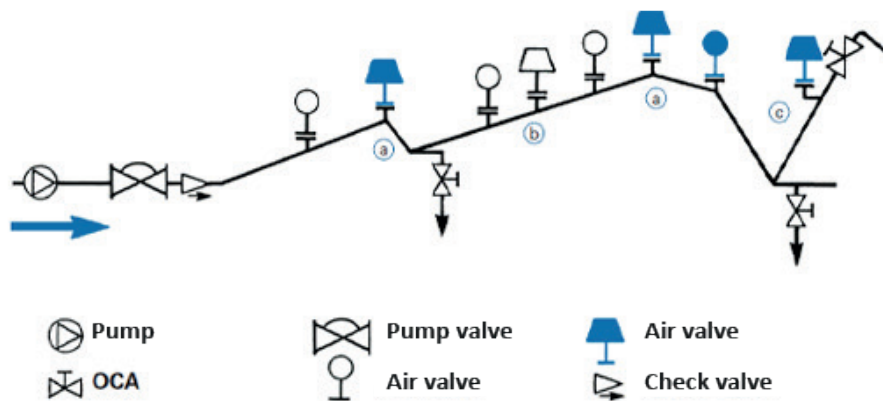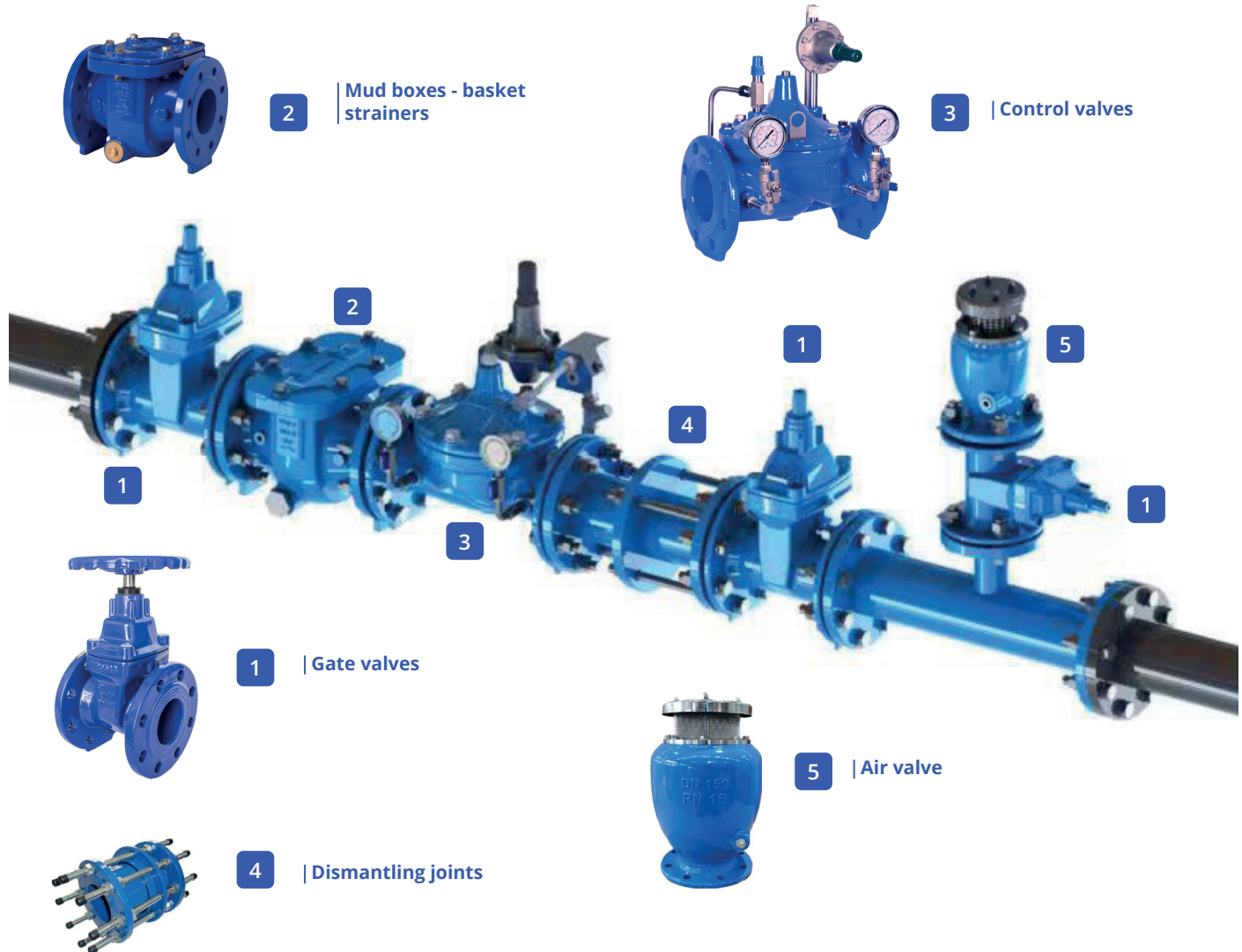
Installation

The installation

• The recommended equipment is vital for safety during filing and maintenance, as well as for the satisfactory opera of the valve.
• For the purposes of illustration, we will look at the case of a Neptune pressure reducing valve. In the case, the air valve is fitted downstream if the pipe runs downwards to the stabiliser or upstream if the pipe runs upwards to the stabiliser.

2 | **Mud boxes - basket strainers**

3 | **Control valves**

1 | **Gate valves**

5 | **Air valve**

4 | **Dismantling joints**

Additional products

Micro air valve - 2-function air mini air valve

Air intake
Air exhaust

ŌMEAX

SIMPLIFIES LIFE !

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