



®

**MIRAB CO.**

Manufacturer of Industrial Valves  
and Relevant Equipment

**Double Chambers-Double Orifices  
Triple Function Air Valves**



## Double Chambers - Double Orifices Triple Function Air Valves

**Size:** DN 80 - 250 mm

**Pressure rate:** PN 10 - 40 bars

**Flange:** drilling according to DIN EN 1092-2 (DIN 2501)

### Product features:

The material of sealing rubber made of EPDM or NBR. The bolts made of galvanized steel or stainless steel (A2). Internal material parts are made of stainless steel. The design is reliable with high capacity and also small dimensions. This air valve can be produced with or without internal shut off valve or ; according to customer order. In case of using air valve without internal shut off system it is strongly recommended to install an isolating valve under air valve. If integrated shut off valve is included it shall be open while valve is in operation. This valve will exhaust pipeline compressed air & can inject required air while line is shutting down or vacuum in pipeline occurs.

### Corrosion protection:

Electrostatic epoxy powder coating with min. 250 micron thickness.

### Testing:

Hydrostatic test Pressure (bar) according to DIN EN 12266-1		
Nominal Pressure PN (bar)	Test Pressure, with water	
	Shell Test	Closure Test
10	17	11
16	25	18
25	38	28
40	60	44

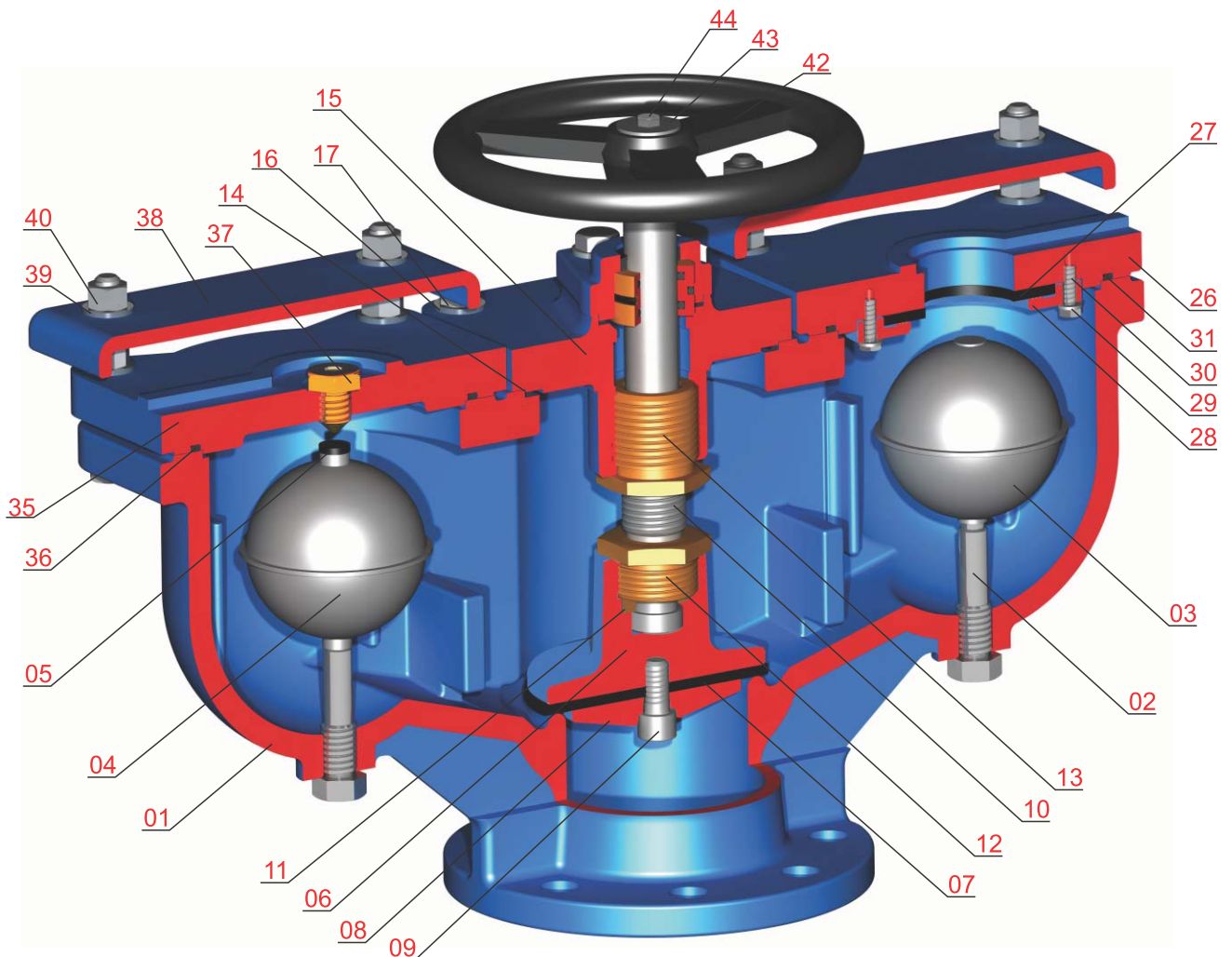
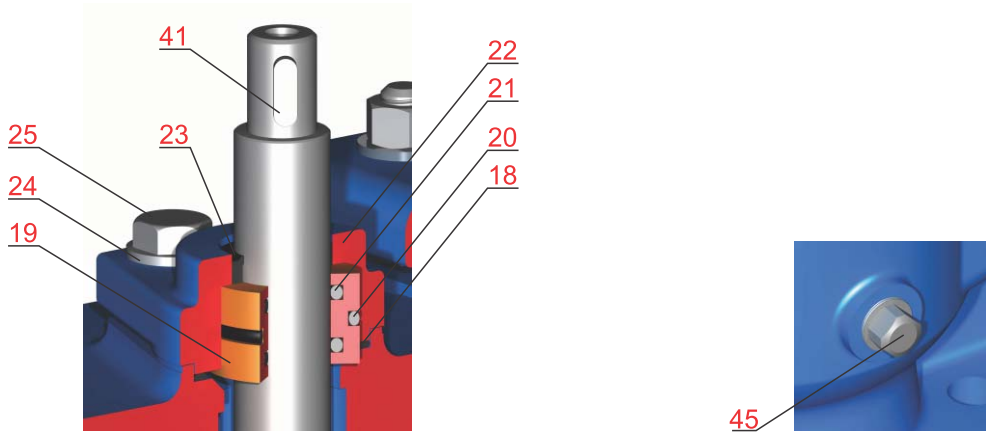
Minimum permissible tightness pressure is 1 bar

### Advantages:

- Equipped with shut-off valve for services during operation
- Fasteners of corrosion resistant steel.
- Float made of stainless steel
- Reliable design



**Air valves with integrated shut-off valve Part list**



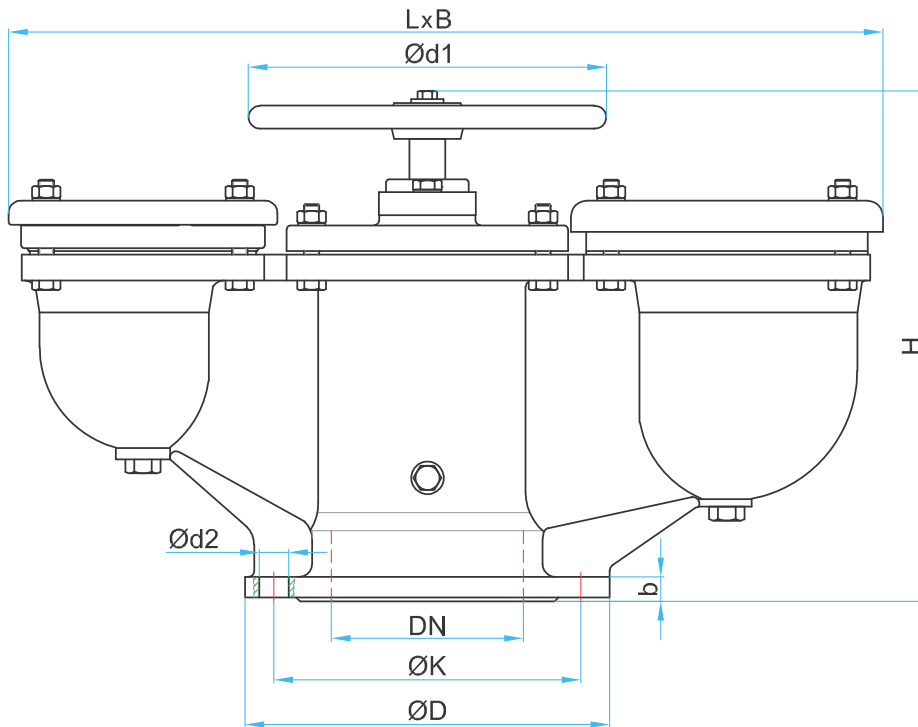


Part No.	Part Name	Part Material	1	2
01	Body	*EN 1563/EN-GJS-400-15		
02	Float guide	DIN EN 10088-3/1.4301		
03	Float	DIN EN 10088-3/1.4301	•	
04	Float	DIN EN 10088-3/1.4301	•	
05	Degassing Gasket	EPDM(NBR on Request)	•	•
06	Valve support	EN 1563/EN-GJS-400-15		
07	Valve Seal	EPDM(NBR on Request)	•	•
08	Valve compression plate	EN 1563/EN-GJS-400-15		
09	Allen screw	ISO 3506-1 Gr.A2 Property Class 70		
10	Stem	DIN EN 10088-3/1.4021	•	
11	Washer	ASTM B148 UNS 95200	•	
12	nut	ASTM B148 UNS 95200	•	
13	Stem nut	ASTM B148 UNS 95200	•	
14	O-ring	NBR ( EPDM on Request)	•	•
15	Mediate Bonnet	EN 1563/EN-GJS-400-15		
16	Washer	ISO 898-2 Property Class 8,Zinc Plated		
17	Hexagon screw	ISO 898-1 Property Class 8.8,Zinc Plated		
18	O-ring	NBR ( EPDM on Request)	•	•
19	bush	ASTM B148 UNS 95200		
20	O-ring	NBR ( EPDM on Request)	•	•
21	O-ring	NBR ( EPDM on Request)	•	•
22	Bush housing	*EN 1563/EN-GJS-400-15		
23	Driving shaft seal	PTFE	•	•
24	Washer	ISO 898-2 Property Class 8,Zinc Plated		
25	Hexagon screw	ISO 898-1 Property Class 8.8,Zinc Plated		
26	Fill. Empty Bonnet	*EN 1563/EN-GJS-400-15		
27	Fill. Empty Gasket	EPDM(NBR on Request)	•	•
28	Support gasket	*EN 1563/EN-GJS-400-15		
29	Washer	ISO 3506-2 Gr.A2 Property Class 70		
30	Hexagon screw	ISO 3506-1 Gr.A2 Property Class 70		
31	O-ring	NBR ( EPDM on Request)	•	•
32	Hexagon screw	ISO 898-1 Property Class 8.8,Zinc Plated		
33	Washer	ISO 898-2 Property Class 8,Zinc Plated		
34	Nut	ISO 898-2 Property Class 8,Zinc Plated		
35	Degassing bonnet	*EN 1563/EN-GJS-400-15		
36	O-ring	NBR ( EPDM on Request)	•	•
37	Nuzzle	ASTM B148 UNS 95200	•	
38	Cover(big orifice)	*EN 1563/EN-GJS-400-15		
39	Washer	ISO 898-2 Property Class 8,Zinc Plated		
40	Nut	ISO 898-2 Property Class 8,Zinc Plated		
41	Key	High Strength Carbon Steel-St 60		
42	Hand wheel	EN 1563/EN-GJS-400-15		
43	Washer	ISO 898-2 Property Class 8,Zinc Plated		
44	Hexagon screw	ISO 898-1 Property Class 8.8,Zinc Plated		
45	Plug screw	DIN EN 10088-3/1.4301		

(1)Recommended spare parts

(2)Parts subjected to wear

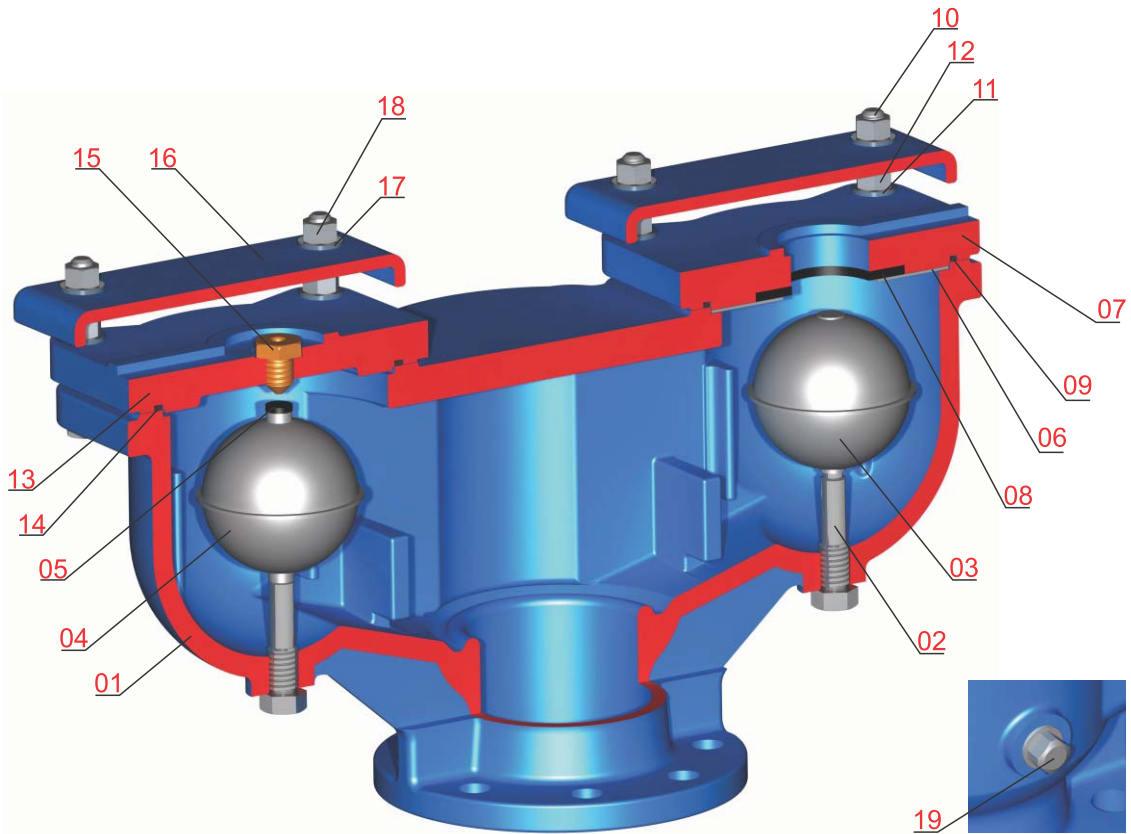
\*EN-GJS-500-7 available on request.

**Dimensions and weight (Air valves with integrated shut-off valve)**


• DIN EN 1092 - 2 (DIN 2501)

	DN	•ØD	•ØK	•Ød2	•n	•b	•Ød1	H	L × B	~W	~V
	mm	mm	mm	mm		mm	mm	mm	mm	Kg	dm <sup>3</sup>
PN 10	80	200	160	19	8	19	200	366	560 × 210	60	10
	100	220	180	19	8	19	200	366	560 × 210	62	10
	150	285	240	23	8	19	280	400	684 × 220	93	15
	200	340	295	23	8	20	280	475	830 × 284	149	15
	250	400	350	23	12	22	280	475	830 × 395	155	15
PN 16	80	200	160	19	8	19	200	366	560 × 210	60	10
	100	220	180	19	8	19	200	366	560 × 210	62	10
	150	285	240	23	8	19	280	400	684 × 220	93	15
	200	340	295	23	12	20	280	475	830 × 284	149	15
	250	400	355	28	12	22	280	475	830 × 395	155	15
PN 25	80	200	160	19	8	19	200	378	560 × 210	60	10
	100	235	190	23	8	19	200	378	560 × 210	62	10
	150	300	250	28	8	20	280	400	684 × 220	93	15
	200	360	310	28	12	22	280	475	830 × 284	149	15
	250	425	370	31	12	24.5	280	475	830 × 395	160	15



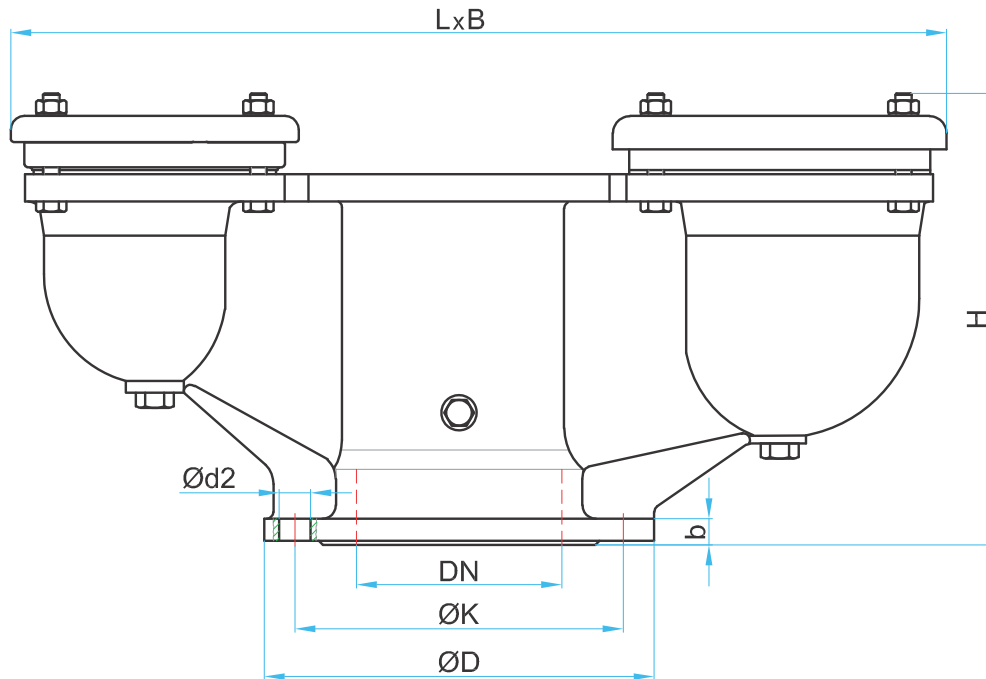
**Air valves without integrated shut-off valve Part list**


Part No.	Part Name	Part Material	1	2
01	Body	* EN 1563/ EN-GJS-400-15		
02	Float guide	DIN EN 10088-3/1.4301		
03	Float	DIN EN 10088-3/1.4301	•	
04	Float	DIN EN 10088-3/1.4301	•	
05	Degassing Gasket	EPDM (NBR on Request)	•	•
06	Disc	DIN EN 10088-3/1.4301	•	
07	Fill.Empt.Bonnet	* EN 1563/EN-GJS-400-15		
08	Fill.Empt.Gasket	EPDM(NBR on Request)	•	•
09	O-ring	NBR (EPDM on Request)	•	•
10	Hexagon screw	ISO 898-1 Property Class 8.8,Zinc Plated		
11	Washer	ISO 898-2 Property Class 8,Zinc Plated		
12	Nut	ISO 898-2 Property Class 8,Zinc Plated		
13	Degassing bonnet	* EN 1563/EN-GJS-400-15		
14	O-ring	NBR (EPDM on Request)	•	•
15	Nuzzle	ASTM B148 UNS 95200	•	
16	Cover(big orifice)	* EN 1563/EN-GJS-400-15		
17	Washer	ISO 898-2 Property Class 8,Zinc Plated		
18	Nut	ISO 898-2 Property Class 8,Zinc Plated		
19	Plug screw	DIN EN 10088-3/1.4301		

1- Recommended spare parts

2- Parts subjected to wear

\*EN-GJS-500-7 available on request.

**Dimensions and weight (Air valves without integrated shut-off valve)**


• DIN EN 1092 - 2 (DIN 2501)

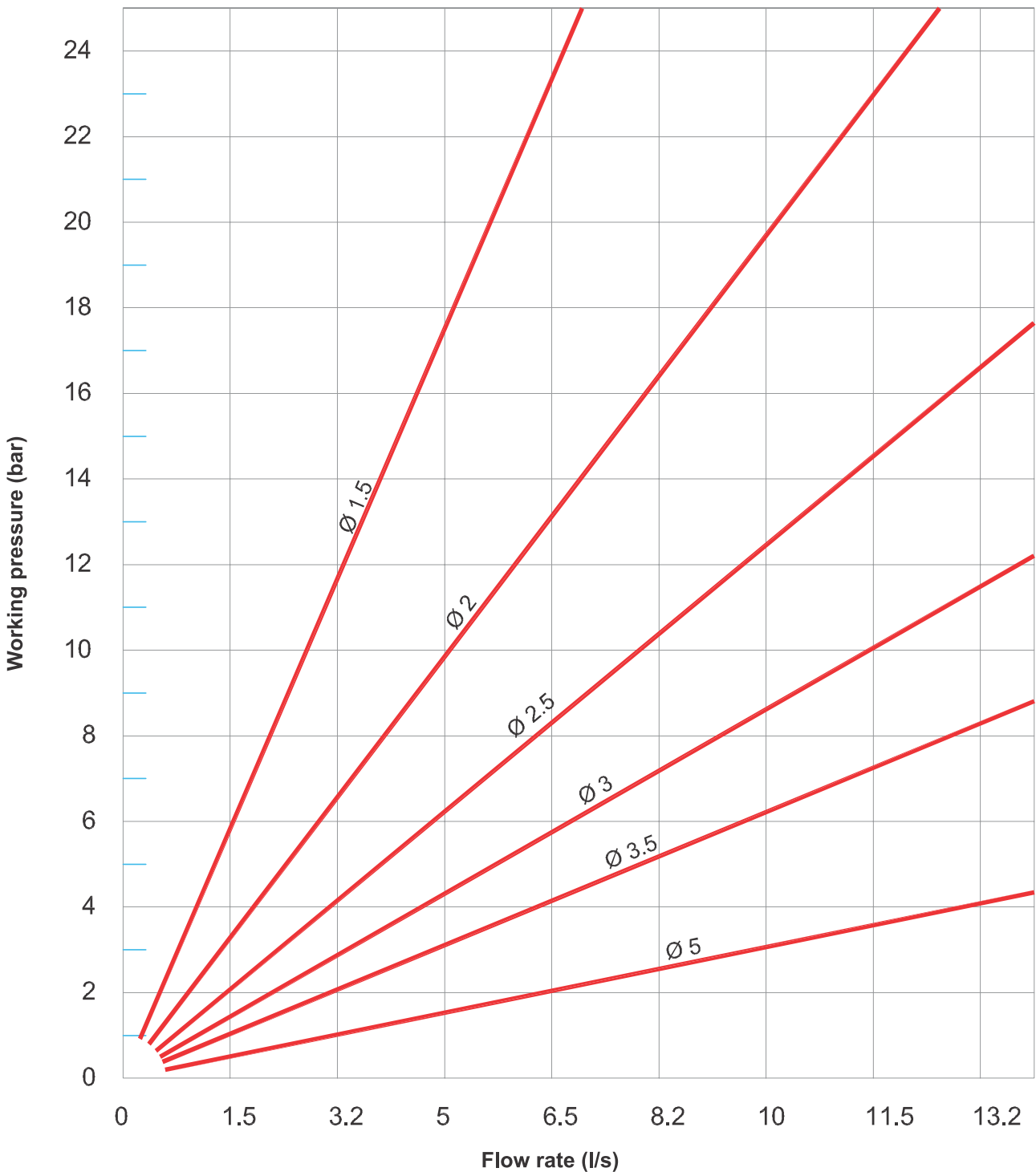
	DN mm	•ØD mm	•ØK mm	•Ød2 mm	•n	•b mm	H mm	L × B mm	~W Kg	~V dm <sup>3</sup>
PN 10	80	200	160	19	8	19	254	560 × 210	26	10
	100	220	180	19	8	19	254	560 × 210	27	10
	150	285	240	23	8	19	274	684 × 220	47	15
	200	340	295	23	8	20	378	830 × 284	85	15
	250	400	350	23	12	22	378	830 × 395	95	15
PN 16	80	200	160	19	8	19	254	560 × 210	26	10
	100	220	180	19	8	19	254	560 × 210	27	10
	150	285	240	23	8	19	274	684 × 220	47	15
	200	340	295	23	12	20	378	830 × 284	85	15
	250	400	355	28	12	22	378	830 × 395	95	15
PN 25	80	200	160	19	8	19	254	560 × 210	26	10
	100	235	190	23	8	19	254	560 × 210	27	10
	150	300	250	28	8	20	274	684 × 220	47	15
	200	360	310	28	12	22	378	830 × 284	87	15
	250	425	370	31	12	24.5	378	830 × 395	99	15



**Large and small orifices Area**

DN (mm)	100	150	200
Large orifice (mm <sup>2</sup> )	1925	6082	12272
Small orifice (mm <sup>2</sup> )	1.7	1.7	1.7

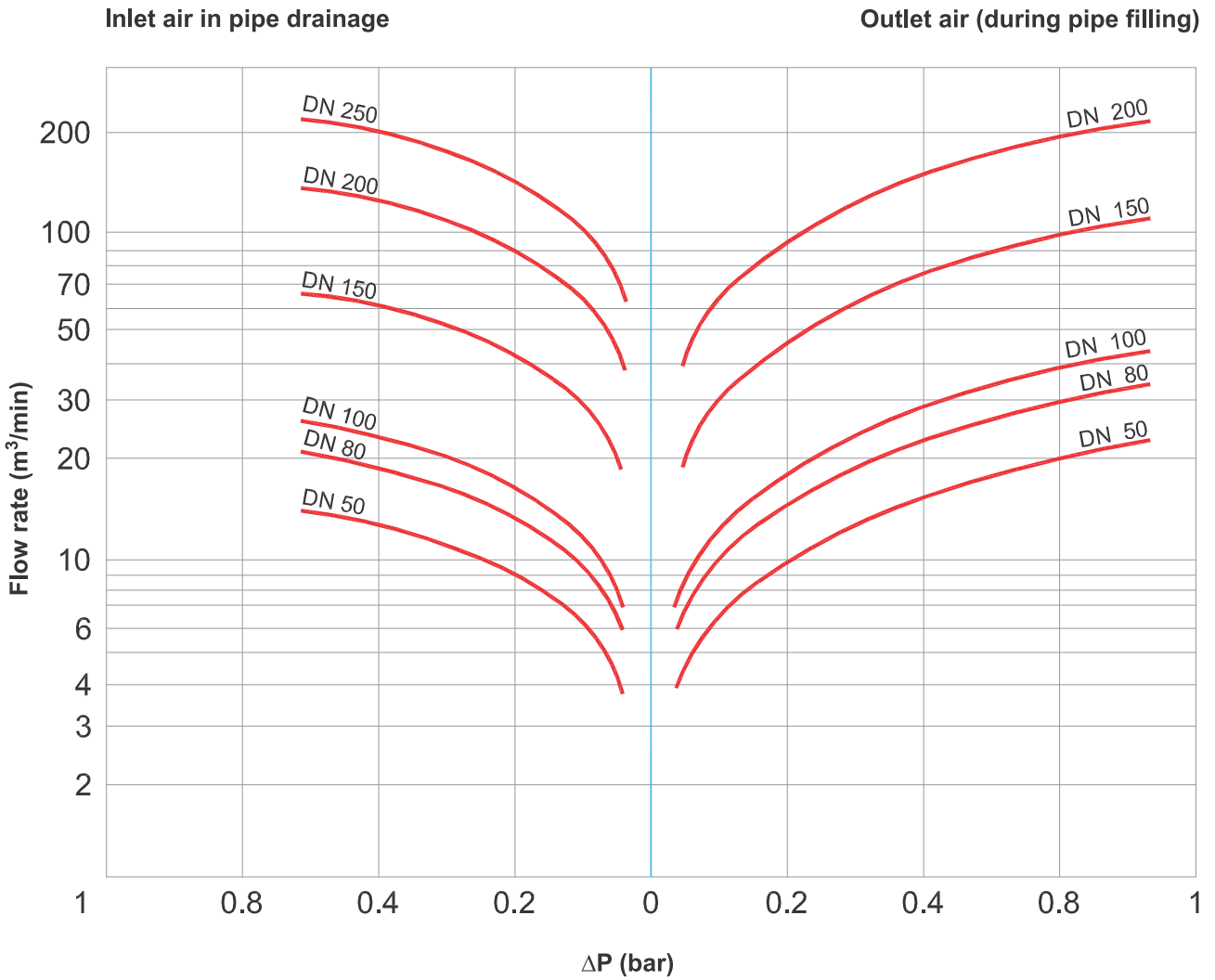
**Amounts of air release under working pressure**







Air flow for the large chamber



## MIRAB Co' PRODUCTS

**Butterfly Valves Family:** Double Flanged Type, Butt-weld End, Wafer Type, Lug Type, Hydraulic Actuated, Pneumatic Actuated.

**Gate Valves Family:** Soft-Sealing Gate Valve, Metal Seat Gate Valve, Knife Gate Valve, Sluice Gate Valve.

**Non Return Valves Family:** Tilting Disc with Counter Weight, Tilting Disk with Counter Weight and Hydraulic Damper, Swing Check Valve, Silent Check Valve, Foot Valve, Nozzle Check Valve, Wafer Pattern Check Valve, Flap Valve.

**Air Vent Family:** Single Chamber - Double Orifices , Double Chambers - Double Orifices, Sewage Air Valves, Large - Orifice Air Valve.

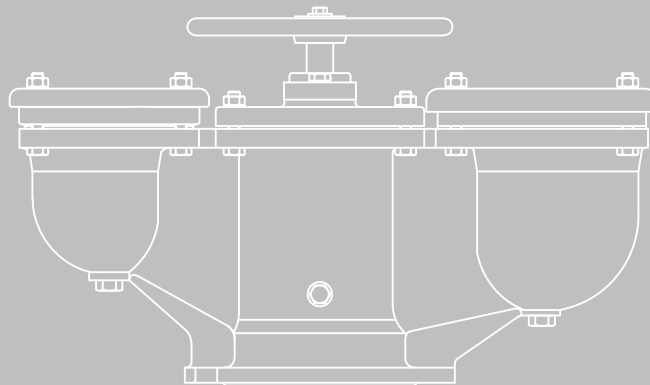
**Control Valves Family:** Automatic Control Valves, Needle Valve, Globe Valve, Fixed Cone Free Discharge Valve, Hollow Jet Valve, Sleeve Valve.

**Hydrant Valves Family:** Standing Type, Pit Type, Wet Barrel Fire Fighting Valve, Post Indicator Valve.

**Strainers Family:** Y Type, T Type, One Side Flanged Type.

**Fittings Family:** Dismantling Joint F1&F2, Pipe Coupling, Flange.

**Actuators:** Electrical, Hydraulic, Pneumatic, Portable Electrical.



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