

DUOJET Automatic Air Valve PN 10, PN 16 and PN 25

flanged type

JIHOMORAVSKÁ ARMATURKA spol.s r.o. **JMA**



Body from ductile cast iron.
Automatic air inlet/outlet valve for high performance.

OFFER

DUOJET	PN	Nominal Size DN										
		40	50 ¹⁾	50 ²⁾	65	80	100	125	150	200	250	
Type 101	PN 10										■	
Type 102	PN 16		■			■	■		■	■		
Type 103	PN 25			■		■	■		■	■		

¹⁾ Socket threaded G1 1/4". ²⁾ Socket threaded G2". Order example: DUOJET type 102 DN 50

DESCRIPTION

Determination

For permanent contact with potable and raw water at permissible service temperature up to 50 °C. Minimal service overpressure to activate sealing of air inlet/outlet orifices is 0,03 MPa.

Permissible water overpressure:

Type 101 max. 1,0 MPa, type 102 max. 1,6 MPa and type 103 max. 2,5 MPa.

Application

Automatic air inlet/outlet valve for feeding, distributing and supplying piping systems. It is not suitable for dirty and sewage water.

There are three independent automatically working functions:

Function 1 – venting (through large orifice) of piping system when filling with water.

Function 2 – air intake (through large orifice) when dewatering of piping system.

Function 3 – venting/air intake (through small orifice) during normal operation of piping system.

Air capacity at working function 3: for DN 50 to DN 100 – 9 m³/hour at working overpressure 0,6 MPa, 13 m³/hour at working overpressure 1,0 MPa, 21 m³/hour at working overpressure 1,6 MPa and 33 m³/hour at working overpressure 2,5 MPa. For DN 150 and DN 200 – 25 m³/hour at working overpressure 0,6 MPa, 42 m³/hour at working overpressure 1,0 MPa, 65 m³/hour at working overpressure 1,6 MPa and 98 m³/hour at working overpressure 2,5 MPa.

Air capacity of venting/air intake at working functions 1 and 2 is stated in tables overleaf.

Connecting Dimensions

According to EN 1092-2, flanges type 21, shape B. Socket threaded acc. to ISO 228-1. Other dimensions stated in a table overleaf.

Materials of Main Parts

Body and cap are from ductile cast iron. Plastic float at DN 50, stainless steel float at all others DN. Closing cone, inside accessories, bolts and washers are from stainless steel. Sealing from EPDM rubber.

Corrosion Protection

Heavy corrosion protection. Outside and inside epoxy – powder coating (shade blue).

Operation

Single chamber valve operated directly by service liquid.

Installation and Maintenance

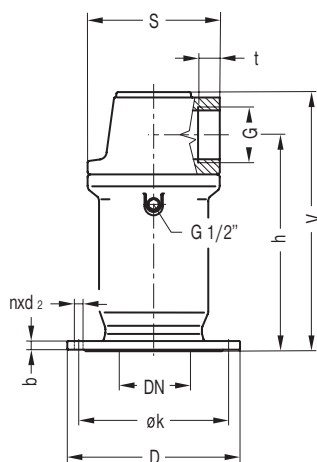
Installation vertically with a flange underneath in exterior or in chambers in the highest positions of piping. Keep DUOJET out of freezing – due to water containing air expansion freezing in small orifices is possible even at temperatures over zero. Further details are stated in KAT 19 12-B.

Testing

Tested with water as per DIN 3230 Part 4.

Modifications are possible upon agreement.

DIMENSIONS (mm)



Nominal Size	DN	40	50	50	65	80	100	125	150	200	250
Dimensions	A		G1 1/4"	G2"		G2"	G2 1/2"		G4"	G4"	
	h		240	282		282	317		423	423	
	S		160	185		185	205		260	260	
	t		20	25		25	30		40	40	
	V		280	340		340	380		510	510	
Connecting Dimensions for PN 10	b									20	
	D									340	
	d ₂									23	
	k									295	
	Holes, off n									8	
	Screw, size									M20	
Connecting Dimensions for PN 16	b		19			19	19		19	20	
	D		165			200	220		285	340	
	d ₂		19			19	19		23	23	
	k		125			160	180		240	295	
	Holes, off n		4			8	8		8	12	
	Screw, size		M16			M16	M16		M20	M20	
Connecting Dimensions for PN 25	b			19		19	19		20	22	
	D			165		200	235		300	360	
	d ₂			19		19	23		28	28	
	k			125		160	190		250	310	
	Holes, off n			4		8	8		8	12	
	Screw, size			M16		M16	M20		M24	M24	
Weight (kg)			15	25		25	28		56	75	

AIR VALVES, ETC.

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Venting capacity m³/hour and air velocity m/s.

Function 1		Air working overpressure (MPa abs)								
		0,105	0,11	0,12	0,13	0,14	0,15	0,16	0,17	0,19 and over
Nominal Size	DN 50 ¹⁾	30	202	345	431	461	490	547	576	634
	DN 50 ²⁾	30	461	720	863	950	1037	1123	1224	1283
	DN 80	30	576	835	1037	1152	1238	1354	1469	1541
	DN 100	30	922	1469	1728	1915	2074	2246	2390	2564
	DN 150, DN 200	30	2304	3629	4349	4781	5155	5587	5976	6480
Wenting air velocity	m/s	20	85	170	200	230	250	270	285	310

Air intake capacity m³/hour.

Function 2		Air working overpressure (MPa abs)					
		0,096	0,09	0,08	0,07	0,06	0,05 and less
Nominal Size	DN 50 ¹⁾	30	230	317	403	490	518
	DN 50 ²⁾	30	432	633	835	1008	1094
	DN 80	30	576	777	1008	1238	1325
	DN 100	30	864	1267	1584	1958	2160
	DN 150, DN 200	30	2304	3370	4176	5060	5500

¹⁾ Socket threaded G1 1/4". ²⁾ Socket threaded G2".

Distributor: Jihomoravská armaturka spol. s r. o.

Group:



VAG-Armaturen GmbH

Bopp & Reuther Group