

Return air disc valve

1.2 Air Flow Data

Neck size in mm dia	Position of disc	Air flow rate								
		L/s	5	10	20	30	40	50	70	90
80	A = +10	Ps (Pa)	< 4	8.92	42.17	100.03				
		NC	< 20	< 20	24	37				
	A = 0	Ps (Pa)	< 4	14.02	69.63	169.66				
		NC	< 20	< 20	31	44				
	A = -10	Ps (Pa)	17.95	50.01	176.52	> 200				
		NC	< 20	22	45	> 45				
100	A = +10	Ps (Pa)	< 4	< 4	15.98	37.27	56.88	95.12		
		NC	< 20	< 20	< 20	22	30	35		
	A = 0	Ps (Pa)	< 4	7.45	24.52	54.92	95.12	144.16		
		NC	< 20	< 20	< 20	29	35	43		
	A = -10	Ps (Pa)	5.98	21.97	74.53	149.06	> 200	> 200		
		NC	< 20	< 20	34	39	> 45	> 45		
125	A = +10	Ps (Pa)	< 4	< 4	6.96	13.93	28.44	40.21	95.12	
		NC	< 20	< 20	< 20	< 20	20	25	35	
	A = 0	Ps (Pa)	< 4	< 4	17.95	40.21	79.92	109.83	> 200	
		NC	< 20	< 20	< 20	< 20	30	35	> 45	
	A = -10	Ps (Pa)	< 4	20.59	69.63	164.75	> 200	> 200	> 200	
		NC	< 20	< 20	23	33	> 45	> 45	> 45	
160	A = +10	Ps (Pa)	< 4	< 4	< 4	7.94	14.02	20.59	50.99	95.12
		NC	< 20	< 20	< 20	< 20	< 20	< 20	28	36
	A = 0	Ps (Pa)	< 4	< 4	7.94	17.06	33.34	51.98	119.64	> 200
		NC	< 20	< 20	< 20	< 20	< 20	25	36	44
	A = -10	Ps (Pa)	< 4	4.90	17.06	37.27	74.53	144.16	> 200	> 200
		NC	< 20	< 20	< 20	< 20	27	33	> 45	> 45
200	A = +10	Ps (Pa)	< 4	< 4	< 4	< 4	7.45	10.98	25.50	42.95
		NC	< 20	< 20	< 20	< 20	< 20	< 20	27	34
	A = 0	Ps (Pa)	< 4	< 4	6.86	13.73	22.56	33.34	82.38	119.64
		NC	< 20	< 20	< 20	< 20	< 20	< 20	35	41
	A = -10	Ps (Pa)	< 4	4.90	15.89	33.34	69.63	109.83	> 200	> 200
		NC	< 20	< 20	< 20	< 20	< 20	< 20	32	> 45

• P_s : Static pressure drop in Pascal.

• Noise Criteria (NC) based on room attenuation of 10 dB.

• A = + 10, 0 & - 10 = Position of the disc 10 mm down of normal position, at normal position, and 10 mm above position.