

Manufactured in accordance with TU 4861-009-64600223-12

300 – 85000 m³/hour

Radial fans BP-80-75 (VR-80-75) are used in HVAC applications of industrial, public, and residential buildings with ductwork.

VR-80-75 fans are equipped with radial impellers with backward-curved blades directly actuated by general purpose industrial three-phase induction motors.

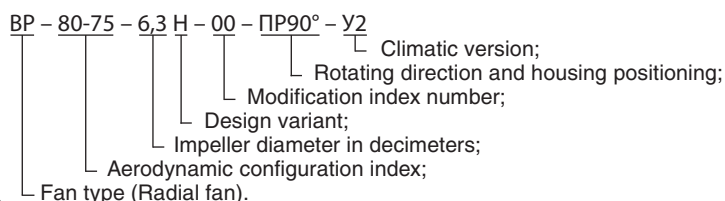
Fans VR-80-75:
available in right-handed and left-handed versions.



Automatic Control System see p.182.

Explosion-proof version is available.

Fans are denoted as follows:



Fan cases may be mounted in any position shown on Figure 1.

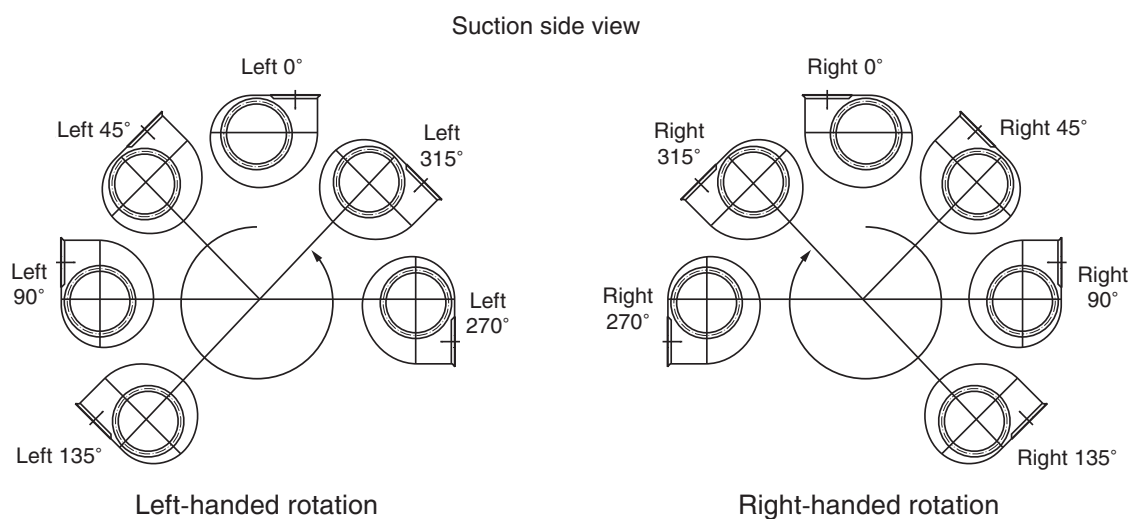
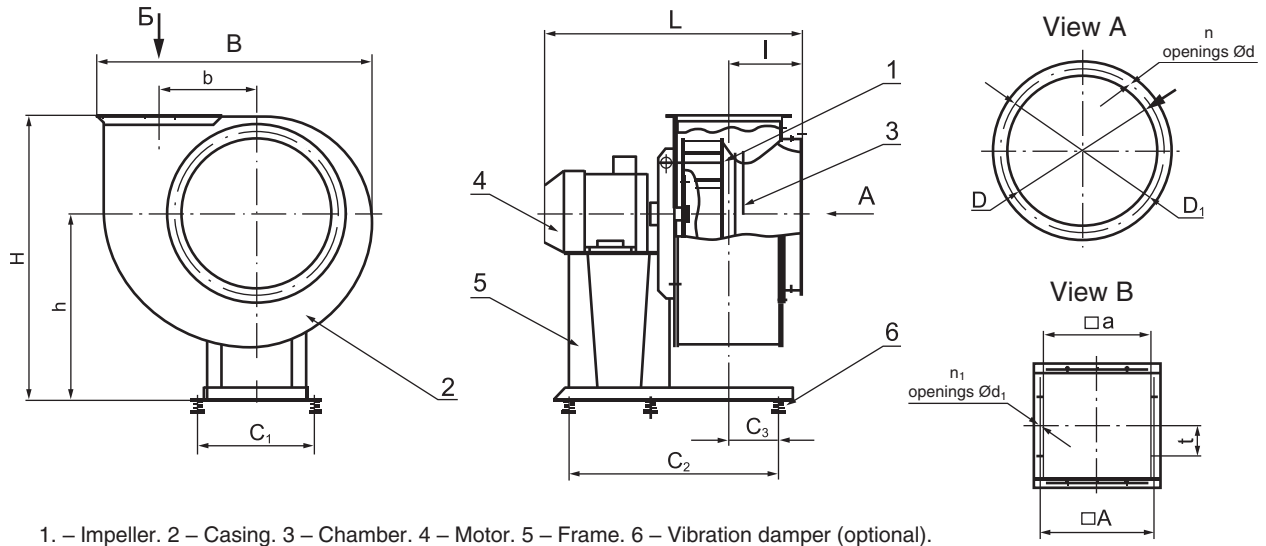


Fig. 1 Fan case position

Fans are used in conditions of moderate climate (Y, YXЛ), cold climate (XЛ) and tropical climate (TC, TB, TM) of the second category of location according to GOST 15150.

It is allowed operating fans according to the first category of location provided special appliances and motor weather protection (see pp.169-170).

- BP-80-75-2,5H... – general purpose;
- BP-80-75-2,5Ж... – general purpose, heat-resistant;
- BP-80-75-2,5K1... – corrosion-proof;
- BP-80-75-2,5K1Ж... – corrosion-proof, heat-resistant;
- BP-80-75-2,5B... – explosion-proof, made of dissimilar metals;
- BP-80-75-2,5BЖ... – explosion-proof, heat-resistant, made of dissimilar metals;
- BP-80-75-2,5B2... – explosion-proof;
- BP-80-75-2,5BK1... – explosion-proof, corrosion-proof;
- BP-80-75-2,5BK1Ж... – explosion-proof, corrosion-proof, heat-resistant.



1. – Impeller. 2 – Casing. 3 – Chamber. 4 – Motor. 5 – Frame. 6 – Vibration damper (optional).

Fig. 1 Installation, connection, and overall dimensions of fans BP-80-75-2,5 ...12,5

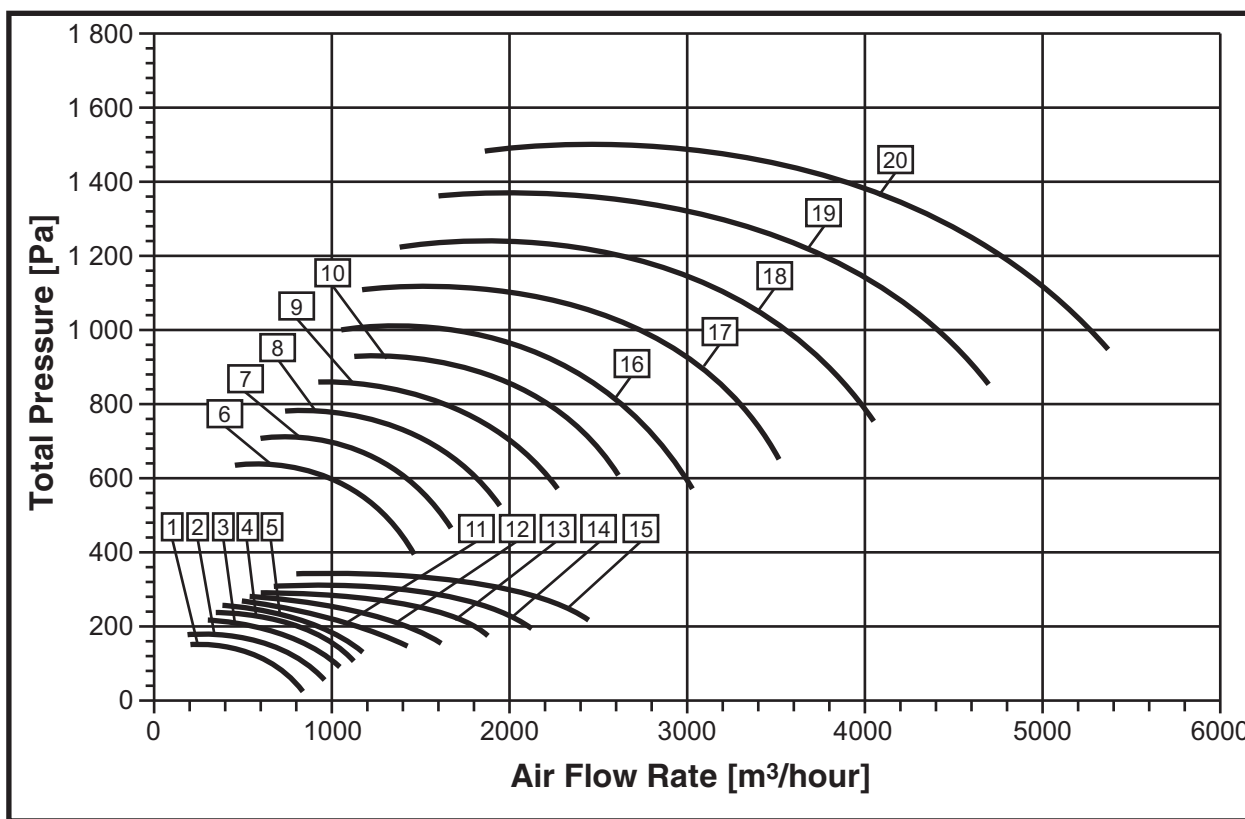
Designation	BP-80-75 (VR-80-75) No. 2,5	BP-80-75 (VR-80-75) No. 3,15	BP-80-75 (VR-80-75) No. 4	BP-80-75 (VR-80-75) No. 5	BP-80-75 (VR-80-75) No. 6,3	BP-80-75 (VR-80-75) No. 8	BP-80-75 (VR-80-75) No. 10	BP-80-75 (VR-80-75) No. 12,5
B	470	584	733	908	1140	1450	1815	2244
L_{max}	480	513	723	685	1030	1160	1440	1800
H	503	634	744	990	1120	1415	1650	2180
b	160	201	260	324	400	520	650	813
l	125	145	174	225	310	385	455	540
h	320	410	470	650	720	905	1130	1370
D	250	315	400	500	630	800	1020	1270
D_1	274	340	430	530	660	840	1060	1310
d	8	8	8	7x14	7x14	11	12	12
n	4	4	4	16	20	16	24	24
A	205	255	310	380	470	600	750	930
a	180	220	280	350	440	560	700	875
t	100	100	100	100	100	150	150	150
d_1	7	7	7	7	7	11	12	12
n_1	12	12	12	16	20	16	20	24
C_1	260	340	410	410	480	610	840	1260
C_2	350	430	630	535	700	410+410	1260	1220
C_3	70	122	240	74	116	165	247	280

BP-80-75 (VR-80-75) Fans Noise Performance

Fan Designation	RPM	Octave sound-power levels [dB] in center frequency bands [Hz]						
		125	250	500	1000	2000	4000	8000
BP-80-75-2,5	1450	64	65	67	72	61	54	44
	2950	80	81	88	79	77	69	59
BP-80-75-3,15	1450	71	79	72	70	68	60	51
	2950	85	88	94	85	84	76	65
BP-80-75-4	1450	79	81	72	70	68	64	51
	2950	77	88	90	81	79	75	65
BP-80-75-5	950	77	85	78	76	74	66	57
	1450	86	94	87	85	83	75	66
BP-80-75-6,3	950	93	86	84	82	80	77	68
	1450	94	102	95	93	91	83	74
BP-80-75-8	950	98	94	92	90	88	82	73
BP-80-75-10	950	106	101	100	98	95	89	83
BP-80-75-12,5	740	107	102	99	97	94	91	82

CHARACTERISTICS SUMMARY DIAGRAM

650 – 85500 m³/hour

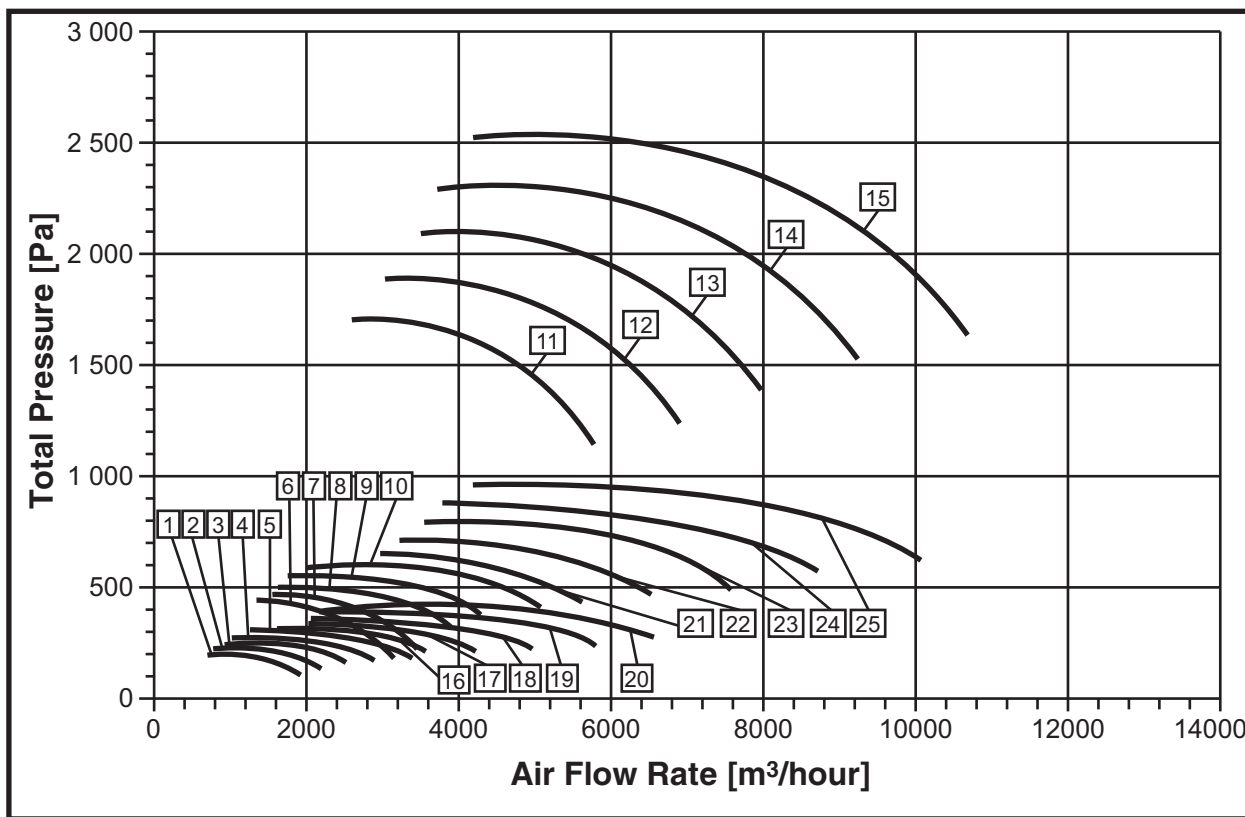


No.	Fan Designation	Modification Number	Motor			Nominal capacity [m ³ /hour]	Weight (max) [kg]
			Type	Rotation speed [rpm]	Power [kW]		
1	BP-80-75-2,5	00	AIP 56 A4	1450	0,12	650	25
		05	AIP 56 B4		0,18	780	
		10	AIP 63A4		0,25	700	
2		01	AIP 56 A4		0,12	750	25
		06	AIP 56 B4		0,18	800	
		11	AIP 63A4		0,25	900	
3		02	AIP 56 A4		0,12	920	25
		07	AIP 56 B4		0,18	940	
		12	AIP 63A4		0,25	990	
4		03	AIP 56 A4		0,12	1050	25
		08	AIP 56 B4		0,18	1080	
		13	AIP 63A4		0,25	1150	
5		04	AIP 56 A4		0,12	1200	30
		09	AIP 56 B4		0,18	1250	
		14	AIP 63 A4		0,25	1300	

No.	Fan Designation	Modification Number	Motor			Nominal capacity [m ³ /hour]	Weight [kg]	
			Type	Rotation speed [rpm]	Power [kW]			
6	BP-80-75-2,5	15	AIP 63 A2	2900	0,37	1300	30	
		16	AIP 63 B2		0,55	1380		
		19	AIP 71 A2		0,75	1450		
7	BP-80-75-2,5	15.1	AIP 63 A2		2900	0,37	1600	30
		17	AIP 63 B2			0,55	1630	
		20	AIP 71 A2			0,75	1680	
8	BP-80-75-2,5	18	AIP 63 B2	2900		0,55	1890	30
		21	AIP 71 A2			0,75	2650	
9		22	AIP 71 A2			0,75	2260	
10		23	AIP 71 A2		0,75	2650	30	
11	BP-80-75-3,15	00	AIP 56 B4		1450	0,18	1300	36
		02	AIP 63 A4			0,25	1350	
		05	AIP 63 B4	0,37		1400		
12		01	AIP 56 B4	0,18		1570	41	
		03	AIP 63 A4	0,25		1600		
	06	AIP 63 B4	0,37	1650				
13	04	AIP 63 A4	0,25	1800				
	07	AIP 63 B4	0,37	1900				
14		04.1	AIP 63 A4	1450		0,25	1900	41
	08	AIP 63 B4	0,37			2200		
15	09	AIP 63 B4	0,37		2500	41		
16	BP-80-75-3,15	10	AIP 71 B2	2900	1,1	2800	44	
		11	AIP 80 A2		1,5	2900		
		14	AIP 80 B2		2,2	2950		
17		12	AIP 80 A2		1,5	2900	44	
		15	AIP 80 B2		2,2	3500		
18		13	AIP 80 A2		1,5	3500		
	16	AIP 80 B2	2,2	4100	44			
19		17	AIP 80 B2	2,2	4500	44		
20		18	AIP 80 B2	2,2	5500	44		

CHARACTERISTICS SUMMARY DIAGRAM

1700 – 10500 m³/hour

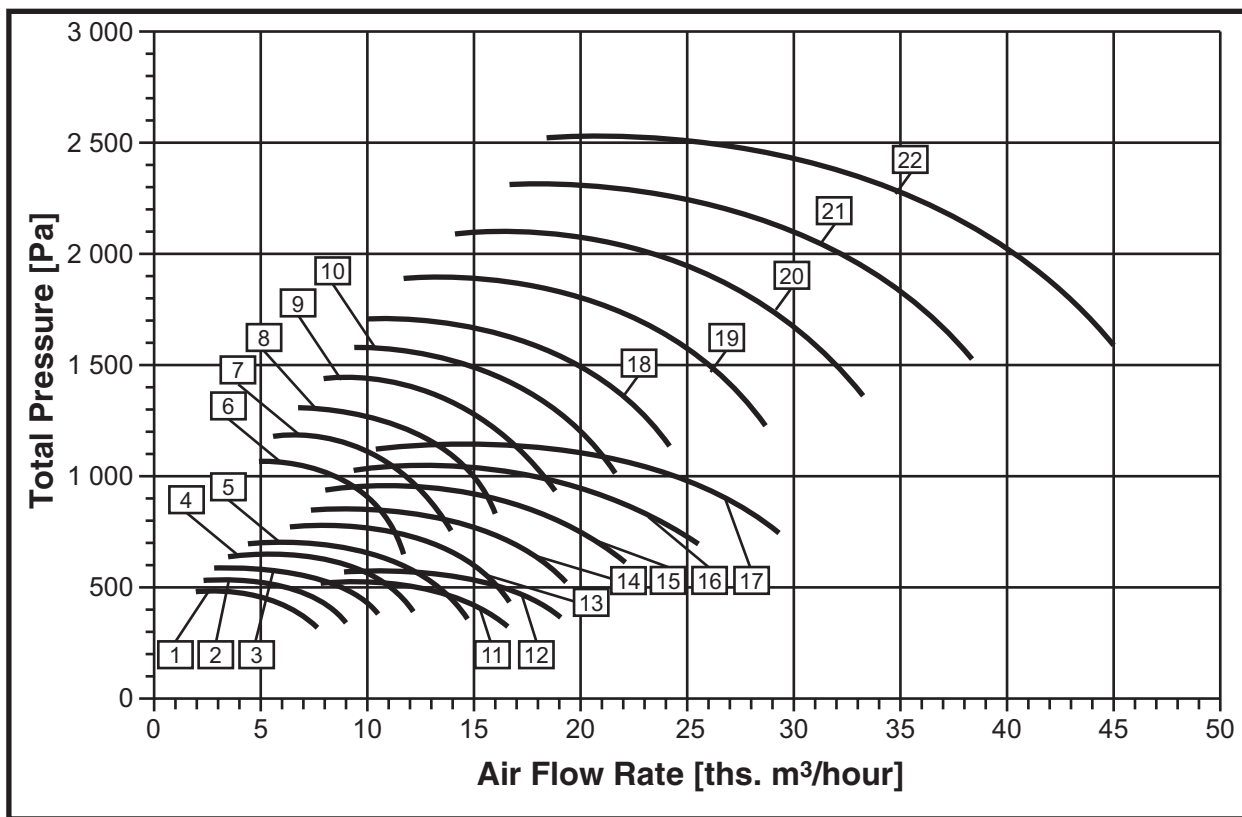


No.	Fan Designation	Modification Number	Motor			Nominal capacity [m ³ /hour]	Weight (max) [kg]
			Type	Rotation speed [rpm]	Power [kW]		
1	BP-80-75-4,0	00	AIP 63 A6	950	0,18	1700	55
		02	AIP 63 B6		0,25	1820	
		05	AIP 71A6		0,37	1900	
		01	AIP 63 A6		0,18	2000	
		03	AIP 63 B6		0,25	2400	
2	BP-80-75-4,0	06	AIP 71A6	0,37	2850	55	
		04	AIP 63 B6	0,25	2300		
3	BP-80-75-4,0	07	AIP 71A6	0,37	2650	55	
		08	AIP 71A6	0,37	3100		
4	BP-80-75-4,0	09	AIP 71A6	0,37	3500	55	
6	BP-80-75-4,0	10	AIP 71 A4	1450	0,55	2500	62
		12	AIP 71 B4		0,75	2700	
		15	AIP 80 A4		1,1	2900	
		20	AIP 80 B4		1,5	3100	
7	BP-80-75-4,0	11	AIP 71 A4	0,55	3000	62	
		13	AIP 71 B4	0,75	3200		
		16	AIP 80 A4	1,1	3400		
		21	AIP 80 B4	1,5	3600		

No.	Fan Designation	Modification Number	Motor			Nominal capacity [m ³ /hour]	Weight (max) [kg]			
			Type	Rotation speed [rpm]	Power [kW]					
8	BP-80-75-4,0	14	AIP 71 B4	1450	0,75	3800	64			
		17	AIP 80 A4		1,1	4000				
		22	AIP 80 B4		1,5	4200				
9		18	AIP 80 A4		1,1	4500		64		
		23	AIP 80 B4			1,5			4800	
10		19	AIP 80 A4		1,1	5000		64		
		24	AIP 80 B4			1,5			5400	
11		BP-80-75-4,0	25		AIP 100 S2	2900		4,0	5500	100
			26		AIP 100 L2			5,5	5900	
	29		AIP 112 M2	7,5	6100					
12	25.1		AIP 100 S2	4,0	6500		100			
	27		AIP 100 L2		5,5			6900		
	30		AIP 112 M2		7,5			7200		
13	28		AIP 100 L2	5,5	7800		100			
	31		AIP 112 M2		7,5			8400		
14	32		AIP 112 M2	7,5	8500		100			
15	33		AIP 112 M2	7,5	9600		100			
16	BP-80-75-5,0		00	AIP 71 A6	950		0,37	3500	94	
			01	AIP 71 B6			0,55	3700		
			04	AIP 80 A6			0,75	3800		
			08	AIP 80 B6			1,1	4000		
17			02	AIP 71 B6			0,55	4000	94	
		05	AIP 80 A6	0,75		4400				
		09	AIP 80 B6	1,1		4900				
18		03	AIP 71 B6	0,55		4900	94			
		06	AIP 80 A6			0,75		5200		
		10	AIP 80 B6			1,1		5500		
19		07	AIP 80 A6	0,75		5700	94			
		11	AIP 80 B6			1,1		6050		
20	12	AIP 80 B6	1,1	6800	94					
21	BP-80-75-5,0	13	AIP 80 A4	1450	1,1	5400	116			
		14	AIP 80 B4		1,5	5600				
		14.5	AIP 80 B4		1,5	5700				
		16	AIP 90 L4		2,2	5900				
		20	AIP 100 S4		3,0	6100				
22		15	AIP 80 B4		1,5	6100	116			
		17	AIP 90 L4			2,2		6600		
		21	AIP 100 S4			3,0		6850		
23		15.1	AIP 80 B4		1,5	6400	116			
		18	AIP 90 L4			2,2		7400		
		22	AIP 100 S4			3,0		7900		
24		19	AIP 90 L4		2,2	7800	116			
		23	AIP 100 S4			3,0		9100		
25		15.3	AIP 80 B4		1,5	9500	116			
		24	AIP 100 S4			3,0		10500		

CHARACTERISTICS SUMMARY DIAGRAM

7300 – 44100 m³/hour

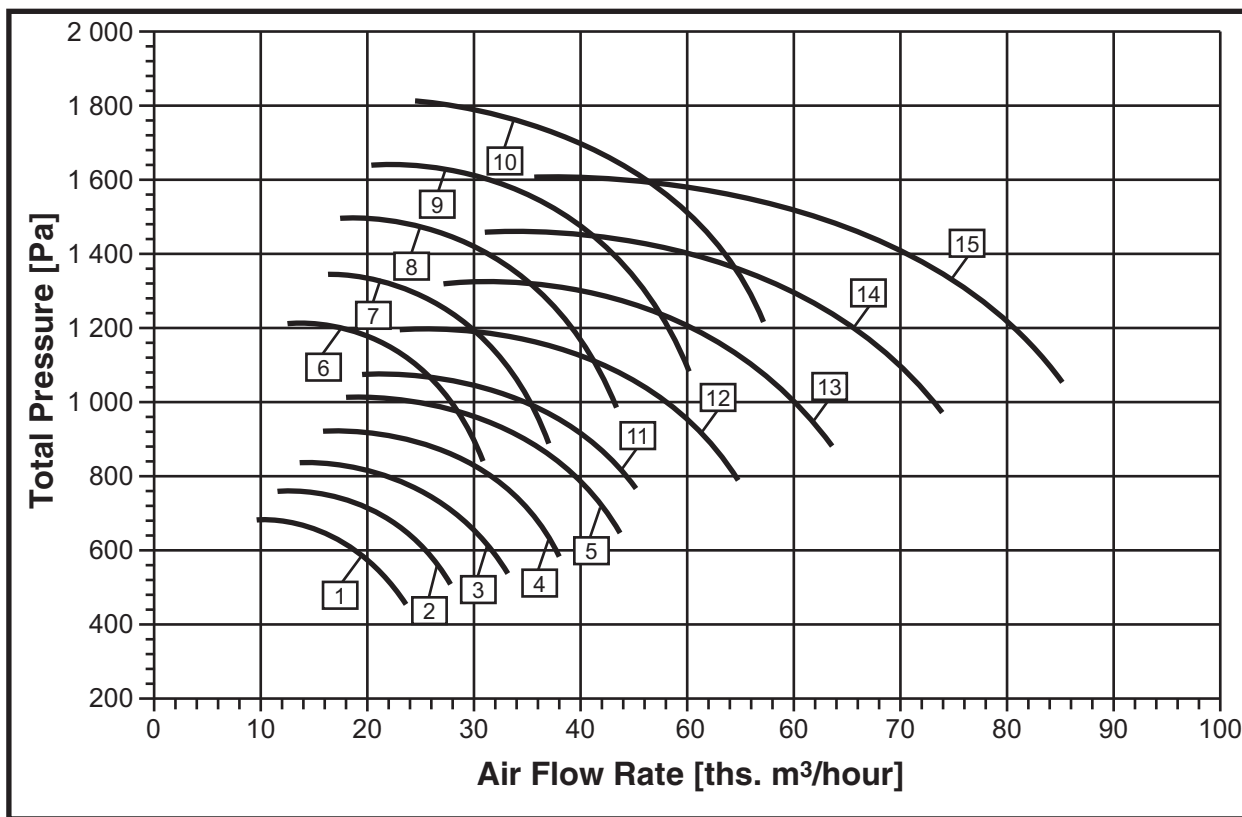


No.	Fan Designation	Modification Number	Motor			Nominal capacity [m ³ /hour]	Weight (max) [kg]	
			Type	Rotation speed [rpm]	Power [kW]			
1	BP-80-75-6,3	00	AIP 80 B6	950	1,1	7300	186	
		01	AIP 90 L6		1,5			
		03	AIP 100 L6		2,2			7700 7800
		07	AIP 112 MA6		3,0			
2		02	AIP 90 L6		1,5	8800	186	
		04	AIP 100 L6		2,2	9000		
		08	AIP 112 MA6		3,0	9150		
3		02.1	AIP 90 L6		1,5	9000	186	
		05	AIP 100 L6		2,2	9900		
		09	AIP 112 MA6		3,0	10600		
4		06	AIP 100 L6		2,2	12050	186	
		10	AIP 112 MA6		3,0	12300		
5		11	AIP 112 MA6		3,0	14100	186	

No.	Fan Designation	Modification Number	Motor			Nominal capacity [m ³ /hour]	Weight (max) [kg]	
			Type	Rotation speed [rpm]	Power [kW]			
6	BP-80-75-6,3	12	AIP 100 L4	1450	4,0	11300	227	
		13	AIP 112 M4		5,5	11420		
		16	AIP 132 S4		7,5	11620		
		20	AIP 132 M4		11,0	11750		
7		14	AIP 112 M4		5,5	13500	227	
			17		AIP 132 S4	7,5		13680
			21		AIP 132 M4	11,0		13820
8		15	AIP 112 M4		5,5	11800	227	
			18		AIP 132 S4	7,5		16000
			22		AIP 132 M4	11,0		16100
9	19	AIP 132 S4	7,5	15000	227			
		23	AIP 132 M4	11,0		18650		
10	19	AIP 132 M4	11,0	21500	227			
11	BP-80-75-8,0	00	AIP 112 MA8	740	2,2	11930	267	
		23	AIP 112 MB8		3,0	16200		
12		01	AIP 112 MA8		2,2	15650	287	
			02		AIP 112 MB8	3,0		18850
13	BP-80-75-8,0	03	AIP 112 MA6	950	3,0	11650	344	
		03.5	AIP 112 MB6		4,0	11870		
		05	AIP 132 S6		5,5	14800		
		08	AIP 132 M6		7,5	15500		
		12	AIP 160 S6		11,0	16100		
14		04	AIP 112 MB6		4,0	13960	344	
			06		AIP 132 S6	5,5		17630
			09		AIP 132 M6	7,5		18720
			13		AIP 160 S6	11,0		19000
15		07	AIP 132 S6		5,5	16350	344	
	10		AIP 132 M6	7,5	21730			
	14		AIP 160 S6	11,0	22100			
16	11	AIP 132 M6	7,5	21660	344			
		15	AIP 160 S6	11,0		25550		
17	16	AIP 160 S6	11,0	29360	344			
18	BP-80-75-8,0	17	AIP 132 M4	1450	11,0	17600	340	
		18	AIP 160 S4		15,0	24120		
19		19	AIP 160 S4		15,0	26680	350	
			19.5		AIP 160 M4	18,5		28400
20		20	AIP 160 M4		18,5	33370	350	
21		21	AIP 180 S4		22,0	38400	380	
22		22	AIP 180 M4		30,0	44100	410	

CHARACTERISTICS SUMMARY DIAGRAM

16580 – 84400 m³/hour



No.	Fan Designation	Modification Number	Motor			Nominal capacity [m ³ /hour]	Weight (max) [kg]
			Type	Rotation speed [rpm]	Power [kW]		
1	BP-80-75-10,0	00	AIP 132 S8	740	4,0	16580	613
		01	AIP 132 M8		5,5	19500	
		03	AIP 160 S8		7,5	22000	
		06	AIP 160 M8		11,0	23600	
2		02	AIP 132 M8		5,5	21500	613
		04	AIP 160 S8		7,5	23570	
		07	AIP 160 M8		11,0	27750	
3		00.2	AIP 132 S8		4,0	25200	613
		05	AIP 160 S8		7,5	30800	
		08	AIP 160 M8		11,0	32500	
4		09	AIP 160 M8		11,0	37500	313
		25	AIP 132 M8		5,5	35650	
5	10	AIP 160 M8	11,0	43100	613		
	23	AIP 160 S8	7,5	40200			
	24	AIP 132 M8	5,5	36700			

No.	Fan Designation	Modification Number	Motor			Nominal capacity [m ³ /hour]	Weight (max) [kg]
			Type	Rotation speed [rpm]	Power [kW]		
6	BP-80-75-10,0	11	AIP 160 S6	950	11,0	27480	663
		12	AIP 160 M6		15,0	29400	
		15	AIP 180 M6		18,5	30300	
		18	AIP 200 M6		22,0	31800	
7		13	AIP 160 M6		15,0	32940	663
		16	AIP 180 M6		18,5	34500	
		19	AIP 200 M6		22,0	37400	
8		11.2	AIP 160 S6		11,0	25400	663
		14	AIP 160 M6		15,0	29600	
		17	AIP 180 M6		18,5	34710	
	20	AIP 200 M6	22,0	43600			
9	21	AIP 200 M6	22,0	48500	663		
10	22	AIP 200 L6	30,0	56160	663		
11	BP-80-75-12,5	00	AIP 160 M8	740	11,0	26300	1120
		01	AIP 180 M8		15,0	32200	
		02	AIP 200 M8		18,5	36500	
		04	AIP 200 L8		22,0	41200	
		07	AIP 225 M8		30,0	43300	
		11	AIP 250 S8		37,0	46500	
12		03	AIP 200 M8		18,5	39280	1120
		05	AIP 200 L8		22,0	44360	
		08	AIP 225 M8		30,0	48750	
		12	AIP 250 S8		37,0	54360	
13		06	AIP 200 L8		22,0	45400	1120
		09	AIP 225 M8		30,0	53410	
		13	AIP 250 S8		37,0	63800	
14		10	AIP 225 M8		30,0	58850	1120
		14	AIP 250 S8		37,0	73800	
15	15	AIP 250 S8	37,0	84400	1120		

Manufactured in accordance with TU 4861-025-64600223-13

950 – 60000 m³/hour

Radial fans BP-280-46 (VR-280-46) are used in HVAC applications of industrial, public, and residential buildings with ductwork.

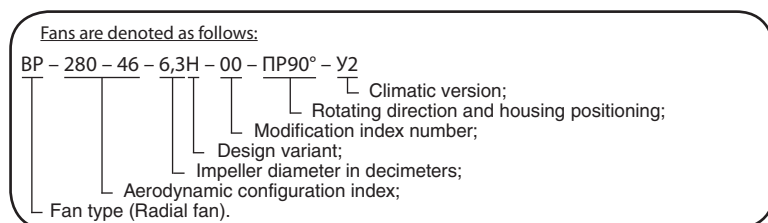
VR-280-46 fans are equipped with radial impellers with forward-curved blades directly actuated by general purpose industrial three-phase induction motors.

Fans VR-280-46:

◆ available in right-handed and left-handed versions.

Automatic Control System see p.182.

Explosion-proof version is available.



Fan cases may be mounted in any position shown on Figure 1.

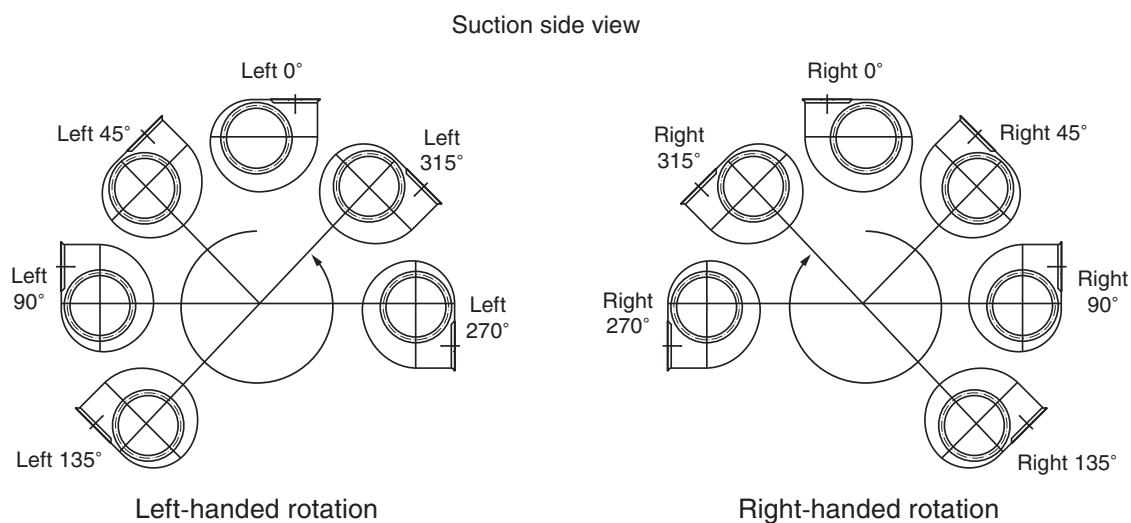
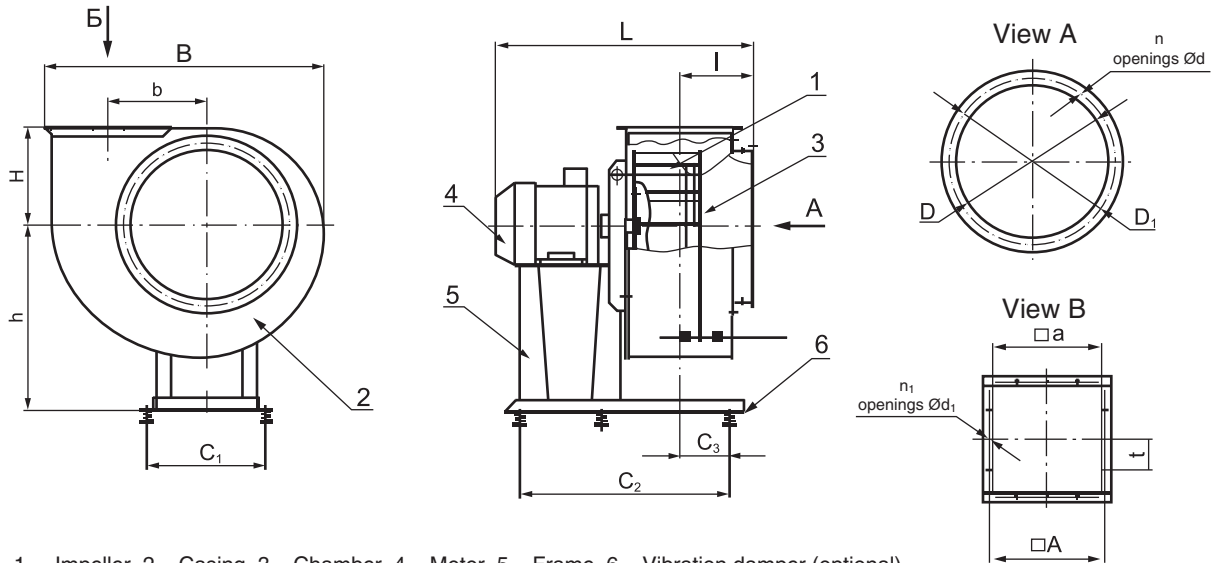


Fig. 1 Fan case position

Fans are used in conditions of moderate climate (Y), boreal climate (VXЛ), cold climate (XЛ), tropical dry climate (TC), tropical humid climate (TB), and tropical coastal climate (TM) of the second category of location according to GOST 15150.

It is allowed operating fans according to the first category of location provided special appliances and motor weather protection (see pp.169-170).

- BP-280-46-2,5..,8H – general purpose;
- BP-280-46-2,5Ж.8Ж – general purpose, heat-resistant;
- BP-280-46-2,5K1...8K1 – corrosion-proof;
- BP-280-46-2,5K1Ж...8K1Ж – corrosion-proof, heat-resistant;
- BP-280-46-2,5B...8B – explosion-proof, made of dissimilar metals;
- BP-280-46-2,5BЖ...8BЖ – explosion-proof, heat-resistant, made of dissimilar metals;
- BP-280-46-2,5B2...8B2 – explosion-proof;
- BP-280-46-2,5BK1...8BK1 – explosion-proof, corrosion-proof;
- BP-280-46-2,5BK1Ж...8BK1Ж – explosion-proof, corrosion-proof, heat-resistant.



1. – Impeller. 2 – Casing. 3 – Chamber. 4 – Motor. 5 – Frame. 6 – Vibration damper (optional).

Fig. 2 Overall and connection dimensions [mm]

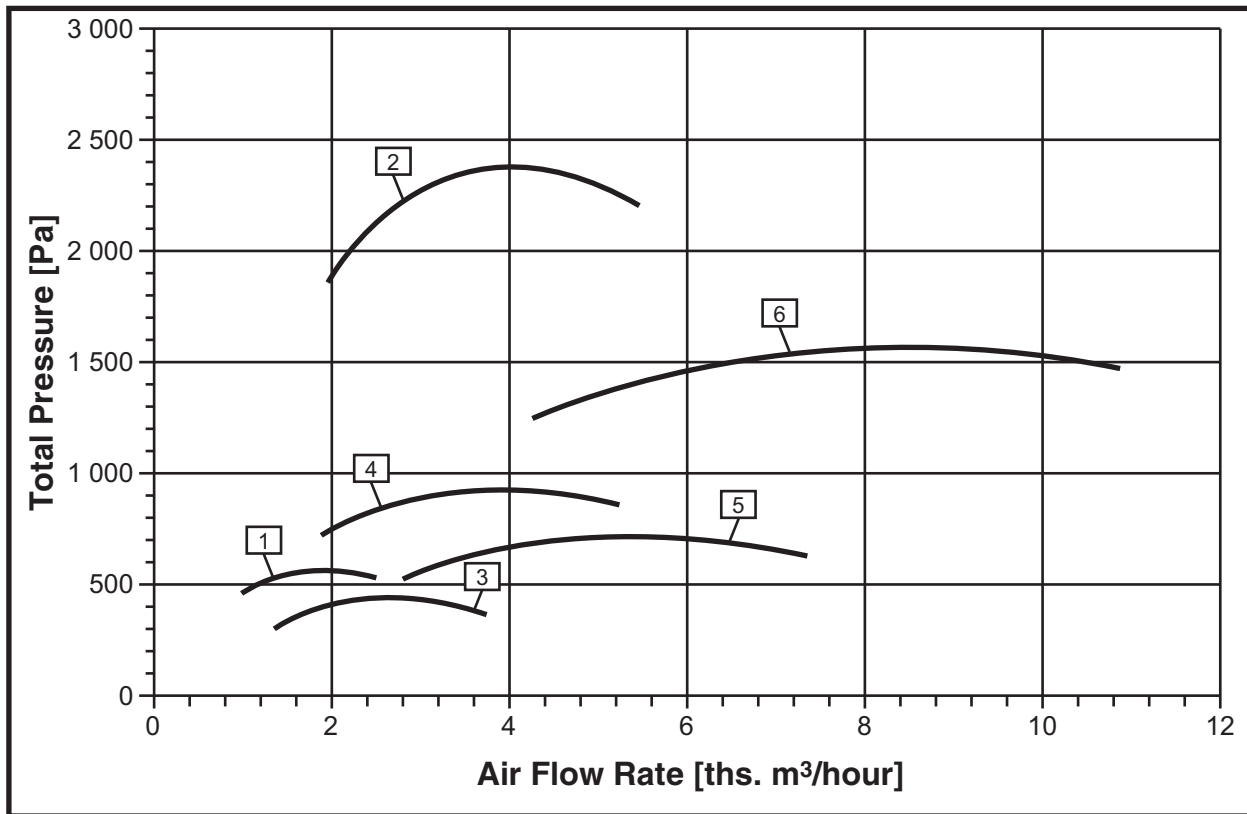
Designation	BP-280-46 (VR-280-46) No. 2,5	BP-280-46 (VR-280-46) No. 3,15	BP-280-46 (VR-280-46) No. 4	BP-280-46 (VR-280-46) No. 5	BP-280-46 (VR-280-46) No. 6,3	BP-280-46 (VR-280-46) No. 8
B	465	580	730	915	1145	1450
L_{max}	625	625	820	1025	1250	1500
H	200	240	290	340	420	535
b	162,5	203	260	325	410	520
l	132	162	182	225	300	370
h	320	410	520	650	720	905
D	250	315	400	500	630	800
D_1	280	345	430	530	660	850
d	7	7	7	7	7	11
n	8	8	8	16	16	16
A	200	255	310	370	470	600
a	175	220	280	350	440	560
t	100	100	100	100	100	150
d_1	7x10	7x10	7x10	7x10	7x10	10x16
n_1	8	12	12	16	20	16
C_1	280	280	350	480	480	660
C_2	514	530	640	920	660	1150
C_3	200	220	270	340	430	500

BP-280-46 (VR-280-46) Fans Noise Performance

Fan Designation	RPM	Octave sound-power levels [dB] in center frequency bands [Hz]						
		125	250	500	1000	2000	4000	8000
BP-280-46-2,5	1450	74	78	80	76	72	67	59
	2950	93	97	99	95	91	86	78
BP-280-46-3,15	950	73	77	79	75	71	66	58
	1450	82	86	88	84	80	75	67
BP-280-46-4	950	80	84	86	82	78	73	65
	1450	91	95	97	93	89	84	76
BP-280-46-5	950	88	92	94	90	86	81	73
	1450	98	102	104	100	96	91	83
BP-280-46-6,3	740	89	93	95	91	87	82	74
	950	97	101	103	99	95	90	82
BP-280-46-8	740	97	101	103	99	95	90	82
	950	104	108	110	106	102	97	89

CHARACTERISTICS SUMMARY DIAGRAM

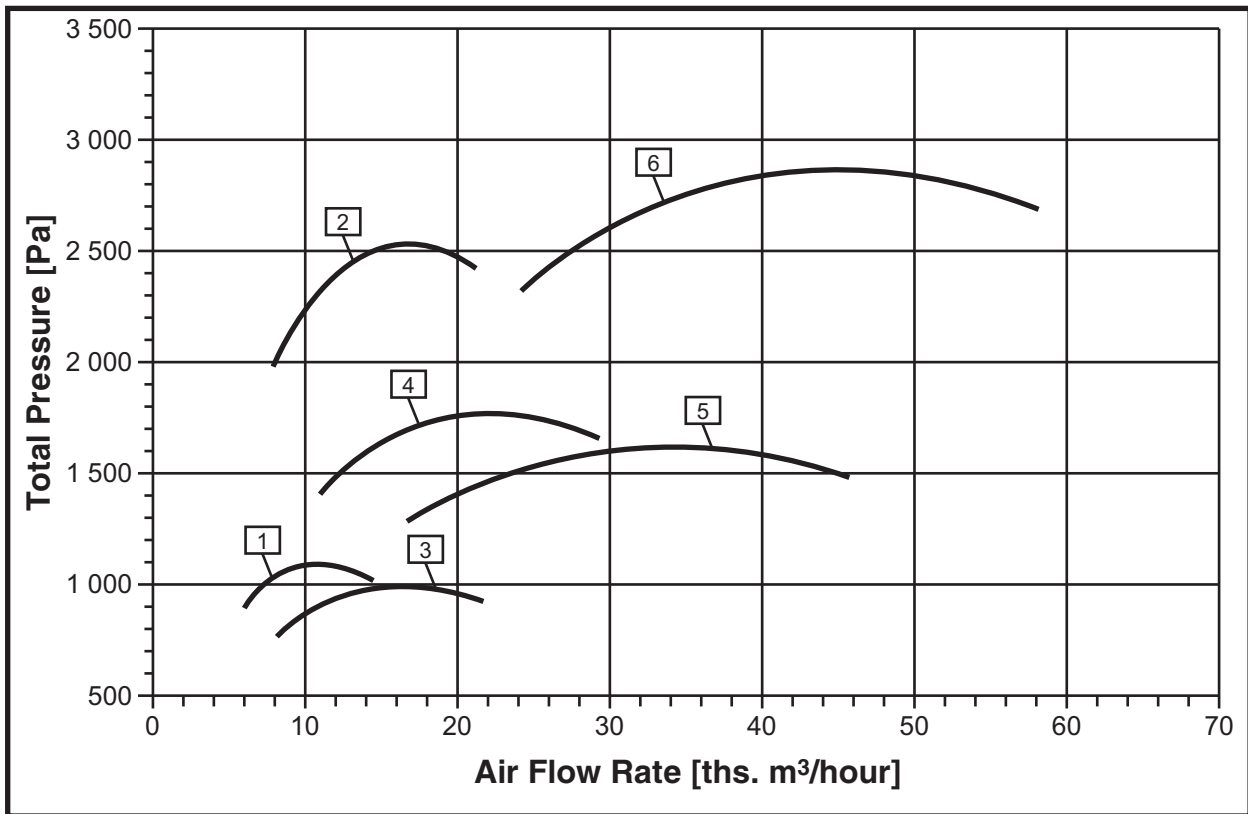
1700 – 11200 m³/hour



No.	Fan Designation	Modification Number	Motor			Nominal capacity [m ³ /hour]	Weight [kg]
			Type	Rotation speed [rpm]	Power [kW]		
1	BP-280-46-2,5	00	63B4	1450	0,37	1700	29
		01	71A4	1450	0,55	2400	34
		02	71B4	1450	0,75	2700	35
2		03	80B2	2950	2,2	2400	41
		04	90L2	2950	3	3100	45
		05	100S2	2950	4	4000	51
	06	100L2	2950	5,5	5250	57	
3	BP-280-46-3,15	00	71A6	950	0,37	2300	40
		01	71B6	950	0,55	3200	44
		02	80A6	950	0,75	3600	47
4		03	80A4	1450	1,1	2980	47
		04	80B4	1450	1,5	3900	52
		05	90L4	1450	2,2	5400	54
	5	00	80B6	950	1,1	3600	61
01		90L6	950	1,5	5200	65	
02		100L6	950	2,2	7400	73	
6		03	100L4	1450	4	6600	74
		04	112M4	1450	5,5	8500	104
	05	132S4	1450	7,5	11200	115	

CHARACTERISTICS SUMMARY DIAGRAM

8000 – 45000 m³/hour



No.	Fan Designation	Modification Number	Motor			Nominal capacity [m ³ /hour]	Weight [kg]	
			Type	Rotation speed [rpm]	Power [kW]			
1	BP-280-46-5	00	112MB6	950	4	8000	128	
		01	132S6	950	5,5	12500	149	
		02	132M6	950	7,5	14900	162	
		2	03	132M4	1450	11	11200	164
			04	160S4	1450	15	14500	210
			05	160M4	1450	18,5	17400	225
			06	180S4	1450	22	20500	250
3	BP-280-46-6,3	07	180M4	1450	30	23000	270	
		00	132S8	745	4	9500	169	
		01	132M8	745	5,5	13000	178	
		02	160S8	745	7,5	19000	253	
		03	160M8	745	11	23000	263	
		4	04	160S6	950	11	15600	283
			05	160M6	950	15	20500	304
			06	180M6	950	18,5	24000	340
07	200M6		950	22	27700	403		
08	200L6		950	30	32000	457		
5	BP-280-46-8	00	180M8	745	15	22000	376	
		01	200M8	745	18,5	26500	431	
		02	200L8	745	22	32000	471	
		03	225M8	745	30	42000	521	
		04	250S8	745	37	48000	566	
		6	05	200L6	950	30	27000	601
			06	225M6	950	37	32000	632
			07	250S6	950	45	38000	746
08	250M6		950	55	45000	801		

Manufactured in accordance with TU 4861-032-64600223-13

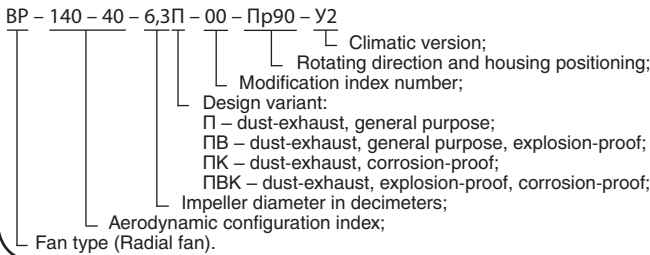
500 – 25000 m³/hour

- ◆ Single-way suction;
- ◆ Helical-type turning housing;
- ◆ Radial blades;
- ◆ 6-blade design;
- ◆ Right-handed or left-handed rotation

Automatic Control System see p.182.



Fans are denoted as follows:



This type of fans is applied in HVAC systems as well as in other industrial applications: dust-trapping units, pressure-pneumatic systems, wood dust and chips removal from woodworking machines, metal dust removal from metalworking machines, grain and grain run-off transportation.

Fans are used for operation in temperate (Y), tropical (T, TB, TC), or cold (XЛ, УХЛ) climate conditions of 2nd category of location according to GOST 15150.

It is allowed operating fans according to the first category of location provided special appliances and motor weather protection (see pp.169-170).

Fan cases may be mounted in any position shown on Figure 1.

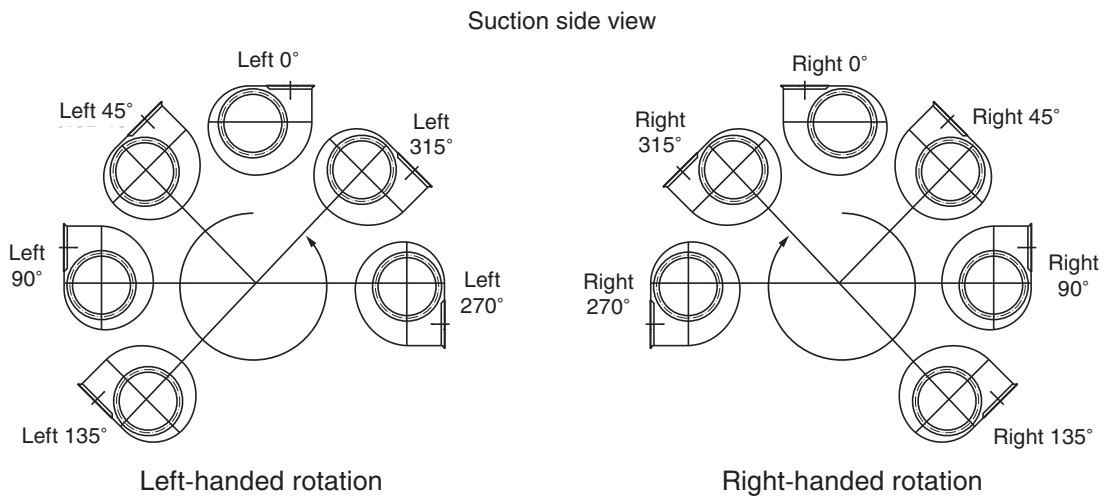
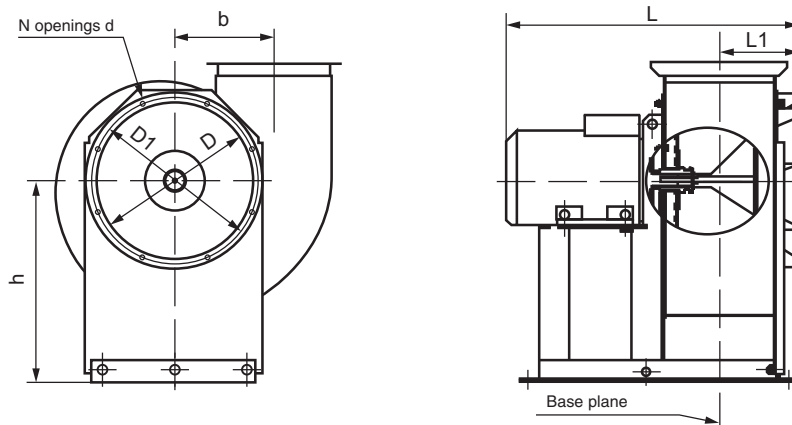
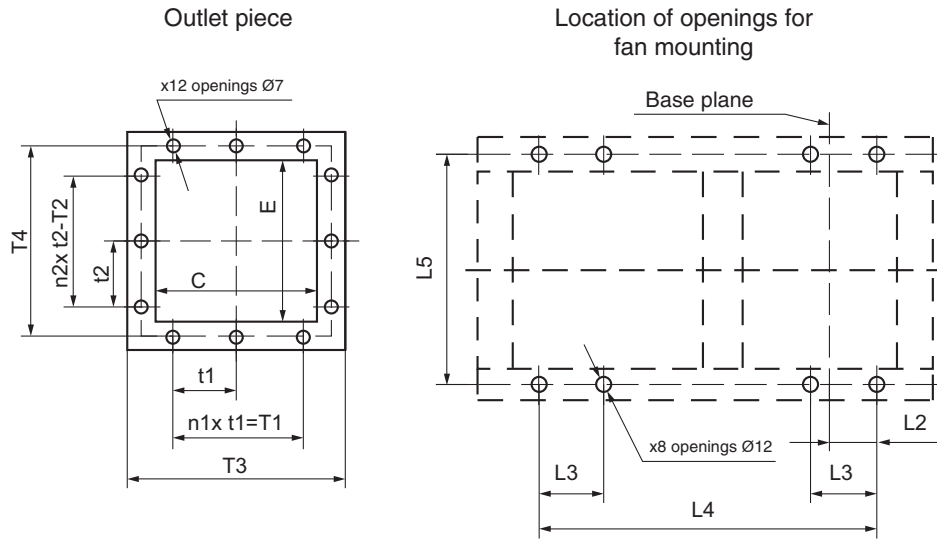


Fig. 1 Fan case position

Fans overall and connection dimensions [mm]:

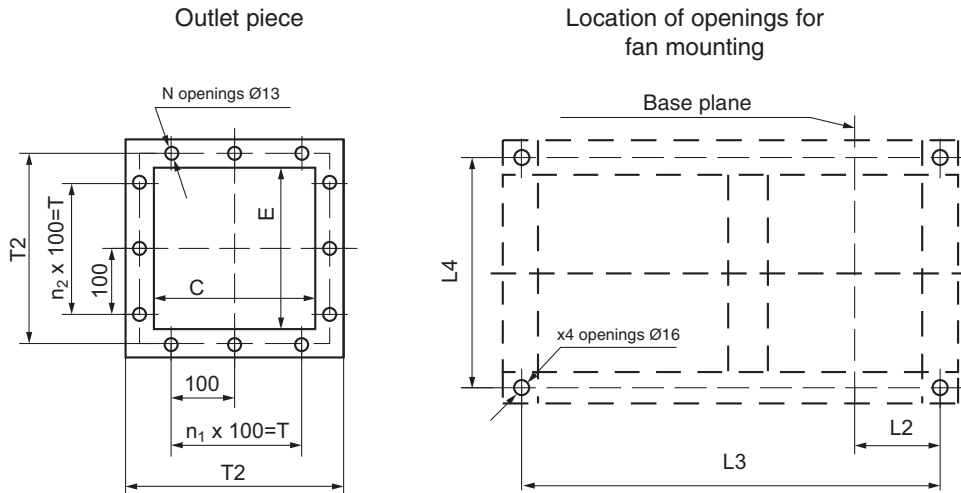


For fans No. 2,5; 3,15; 4.



Fan No.	Dimensions [mm]										
	D	D1	d	C	E	b	h	Lmax	L1	L2	L3
2,5	140	170	7	175	150	162.5	300	445	106	24	80
3,15	215	245	7	221	189	205	395	515	132	55	80
4	264	294	7	280	240	260	520	690	168	93	10
Fan No.	Dimensions [mm]								N	n ₁	n ₂
	L4	L5	t1	t2	T1	T2	T3	T4			
2,5	282	220	65	65	130	130	209	168	12	2	2
3,15	348	226	84	75	168	150	254	221	12	2	2
4	463	290	110	95	220	190	320	285	12	2	2

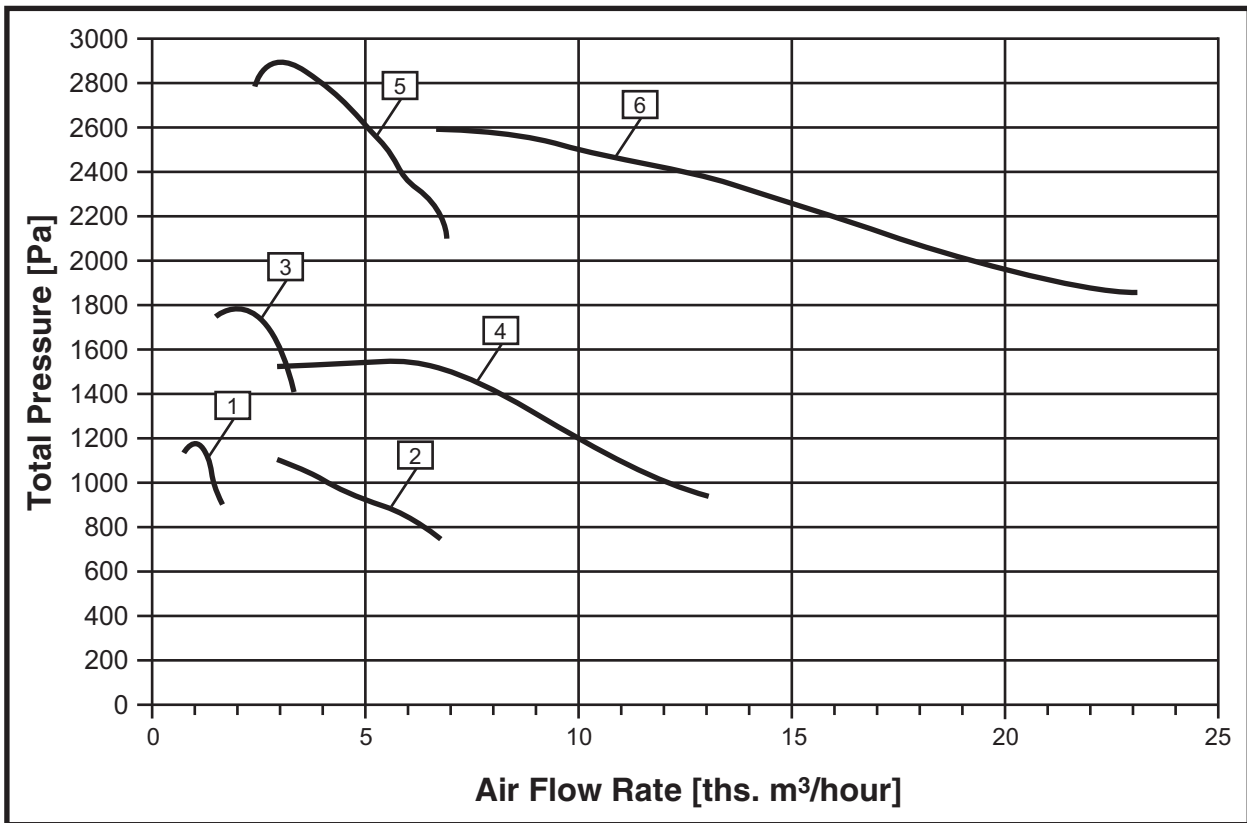
For fans No. 5; 6,3; 8.



Fan No.	Dimensions [mm]										
	D	D1	d	C	E	b	h	Lmax	L1	L2	L3
5	350	390	13	300	300	250	550	850	250	182	630
6,3	440	500	13	378	378	315	670	1070	303	219	810
8	560	610	13	480	480	400	845	1350	388	287	1078
Fan No.	Dimensions [mm]							N	n ₁	n ₂	
	L4	T			T2						
5	410	200			342		8	12	2		
6,3	502	300			418		8	16	3		
8	690	400			520		12	20	4		

FAN AERODYNAMIC PERFORMANCE:

500 – 25000 m³/hour



No.	Fan Model	Modification No.	Motor			Fan Weight [kg]
			Type	Rotation speed [rpm]	Power [kW]	
1	BP-140-40-2,5	00	AIP80MB2	2850	2,2	24,5
2	BP-140-40-3,15	00	AIP90L2	2850	3,0	37
		01	AIP100S2	2850	4,0	38
3	BP-140-40-4	00	AIP100L2	2850	5,5	70,5
		01	AIP112M2	2850	7,5	81
4	BP-140-40-5	00	AIP132S4	1450	7,5	182
		01	AIP132M4	1450	11,0	220
5	BP-140-40-6,3	00	AIP132M4	1450	11,0	245
		01	AIP160S4	1450	15,0	285
6	BP-140-40-8	01	AIP180S4	1450	22,0	427
		02	AIP180M4	1450	30,0	427

Manufactured in accordance with TU 4861-024-64600223-13

500 – 40000 m³/hour

Fans may be applied to supply relatively low volume of air under pressure of up to 10,000Pa. These fans are characterized by considerably high efficiency.

High-pressure radial fans are used as blowers, or for delivery pressure-pneumatic systems, etc.

VR-120-28 fans are available in:

- ◆ right-handed rotation and left-handed rotation versions.

Automatic Control System see p.182.



Fans are denoted as follows:

BP - 120 - 28 - 6,3H - 00 - ПР90° - Y2

- BP - Fan type (Radial fan).
- 120 - Aerodynamic configuration index;
- 28 - Impeller diameter in decimeters;
- 6,3H - Design variant;
- 00 - Modification index number;
- ПР90° - Rotating direction and housing positioning;
- Y2 - Climatic version;

Fan cases may be mounted in any position shown on Figure 1.

Suction side view

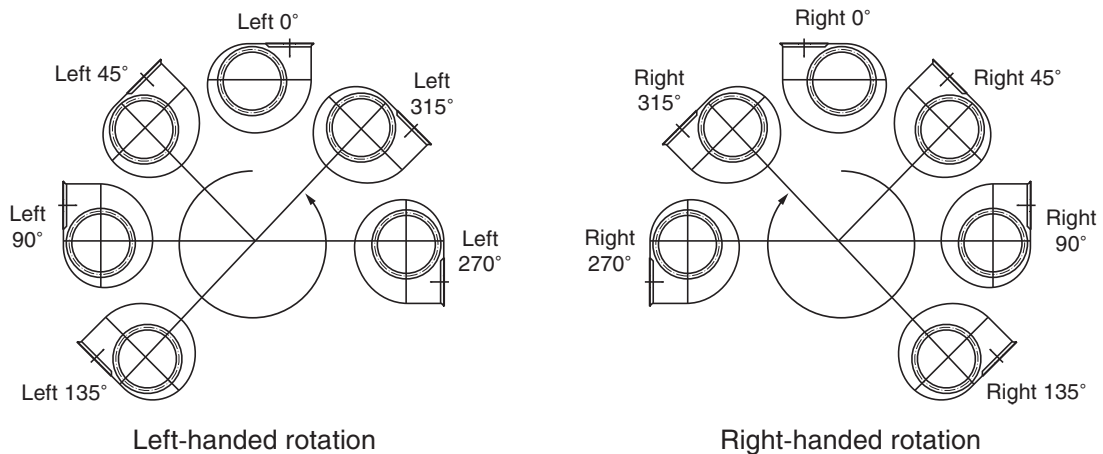


Fig. 1 Fan case position

Fans are used in conditions of moderate climate (Y), boreal climate (YXЛ), cold climate (XЛ), tropical dry climate (TC), tropical humid climate (TB), and tropical coastal climate (TM) of the second category of location according to GOST 15150.

It is allowed operating fans according to the first category of location provided special appliances and motor weather protection (see pp.169-170).

- BP-120-28-5...10H – general purpose;
- BP-120-28-5Ж...10Ж – general purpose, heat-resistant;
- BP-120-28-5K1...10K1 – corrosion-proof;
- BP-120-28-5K1Ж...10K1Ж – corrosion-proof, heat-resistant;
- BP-120-28-5B...10B – explosion-proof, made of dissimilar metals;
- BP-120-28-5BЖ...10BЖ – explosion-proof, heat-resistant, made of dissimilar metals;
- BP-120-28-5B2...10B2 – explosion-proof;
- BP-120-28-5BK1...10BK1 – explosion-proof, corrosion-proof;
- BP-120-28-5BK1Ж...10BK1Ж – explosion-proof, corrosion-proof, heat-resistant.

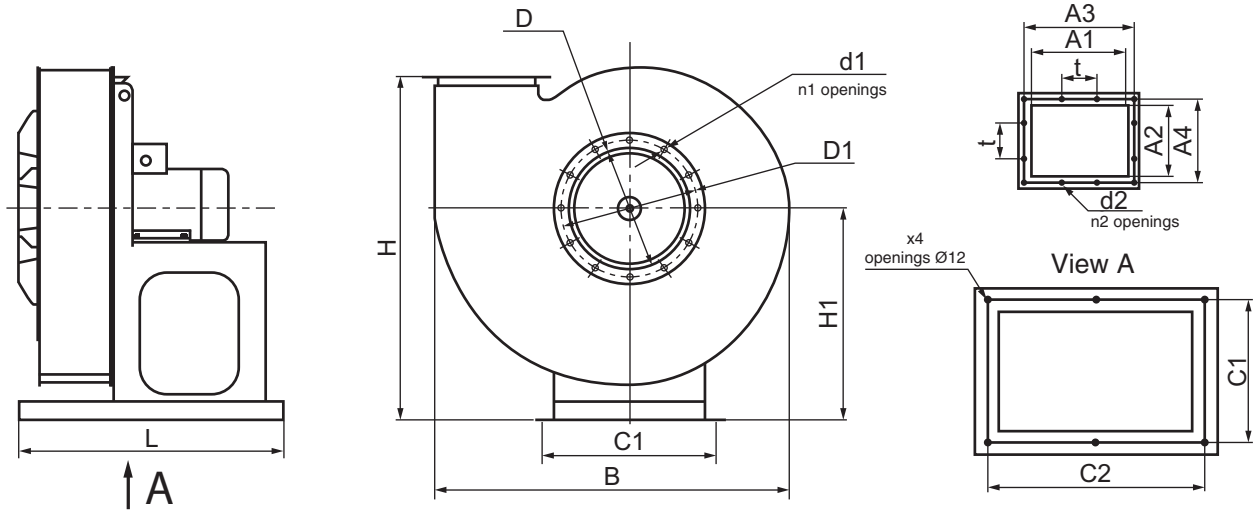
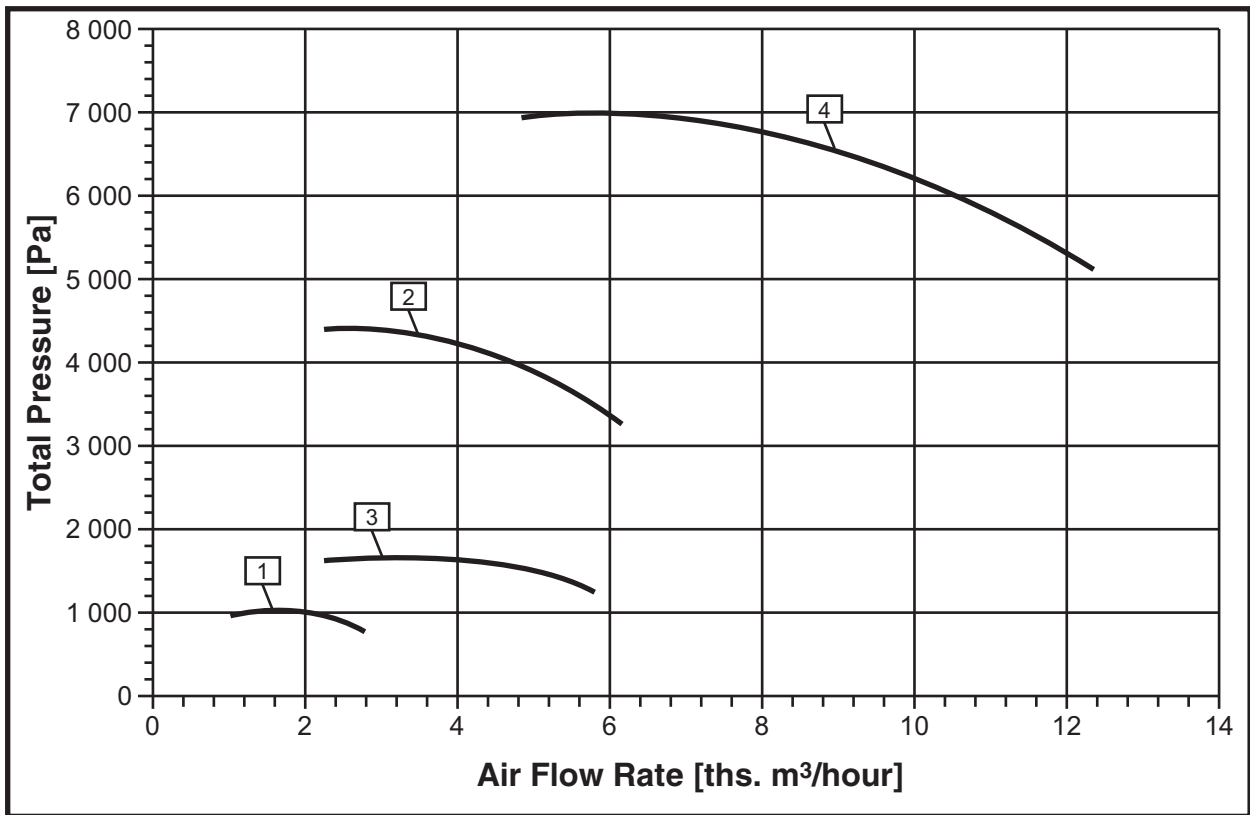


Fig. 2 Overall and connection dimensions [mm]

Designation	BP-120-28 №5	BP-120-28 №6,3	BP-120-28 №8	BP-120-28 №10
B	766	968	1208	1510
L	683	846	945	1110
H	756	1038	1205	1475
b	300	378	480	600
l	120	140	200	250
h	450	650	700	850
D	200	316	320	400
D1	280	360	430	540
d	7	7	7	9
n	8	8	8	8
A1	200	252	320	400
A2	150	189	240	300
t	100	100	100	120
d1	9	9	13	13
n1	12	12	12	16
C1	340	460	480	480
C2	400	550	580	670
d2	15	15	24	24
A2	250	300	380	460
A3	100	240	300	360
n2	10	10	14	14

CHARACTERISTICS SUMMARY DIAGRAM

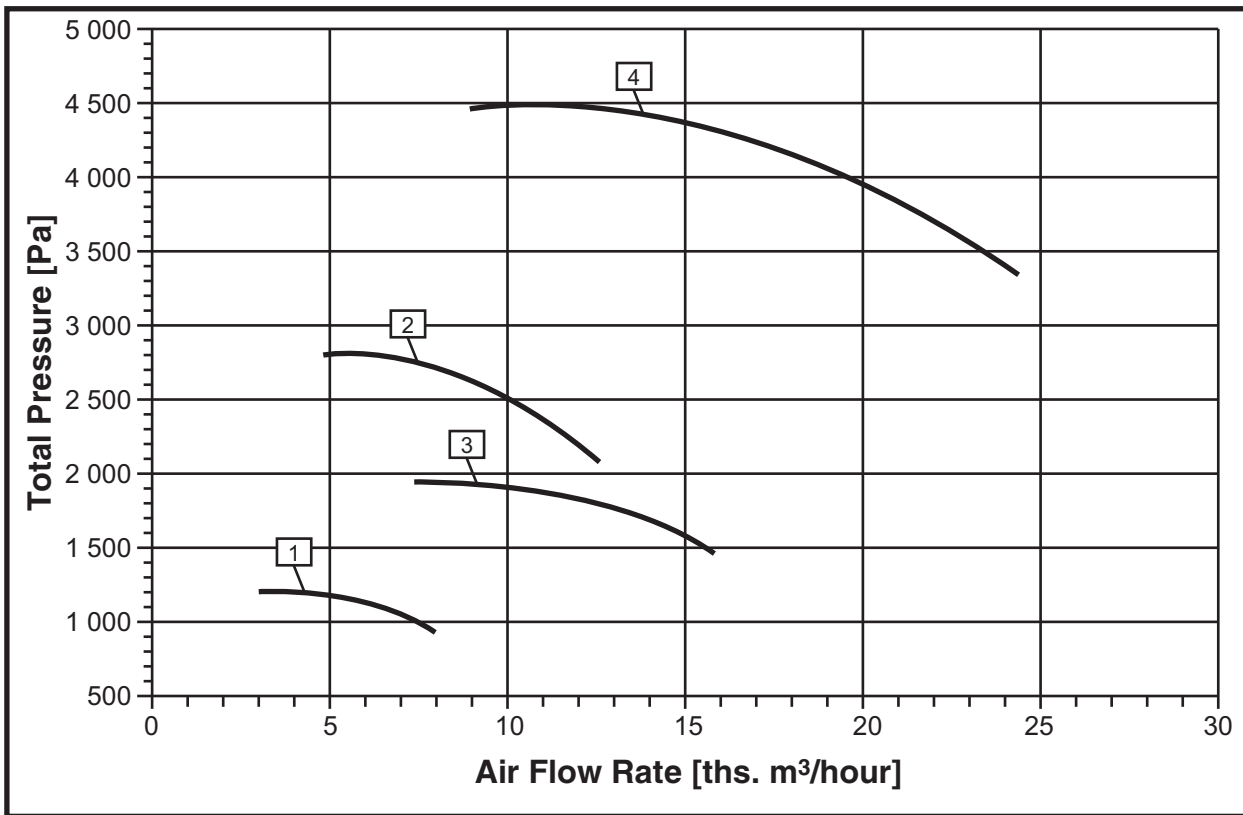
2150 – 12425 m³/hour



No.	Fan Designation	Modification Number	Motor			Air Handling Capacity [m ³ /hour]	Weight [kg]
			Motor Type	Rotation Speed [rpm]	Installed power [kW]		
1	BP-120-28-5	00	71B4	1500	0,75	2150	59
		01	80A4	1500	1,1	2970	63
		02	80B4	1500	1,5	2970	65
2		03	100L2	3000	5,5	3240	77
		04	112M2	3000	7,5	4700	98
		05	132M2	3000	11	6190	103
3	BP-120-28-6,3	00	90L4	1500	2,2	3470	122
		01	100S4	1500	3	5285	126
		02	100L4	1500	4	6005	142
4		03	160S2	3000	15	5035	221
		04	160M2	3000	18,5	6615	235
		05	180S2	3000	22	8155	255
		06	180M2	3000	30	12425	275

CHARACTERISTICS SUMMARY DIAGRAM

4650 – 25025 m³/hour



No.	Fan Designation	Modification Number	Motor			Air Handling Capacity [m ³ /hour]	Weight [kg]
			Motor Type	Rotation Speed [rpm]	Installed power [kW]		
1	BP-120-28-8	00	100L6	1000	2,2	4650	204
		01	112MA6	1000	3	7160	211
		02	112MB6	1000	4	8280	220
2		03	112M4	1500	5,5	4630	215
		04	132S4	1500	7,5	6765	222
		05	132M4	1500	11	11625	230
		06	160S4	1500	15	12680	295
3	BP-120-28-10	00	132S6	1000	5,5	6810	361
		01	132M6	1000	7,5	10055	366
		02	160S6	1000	11	16515	430
4		03	160M4	1500	18,5	9815	447
		04	180S4	1500	22	12025	465
		05	180M4	1500	30	17820	495
		06	200M4	1500	37	25025	535