



OPEN BONNET WITH LEVER

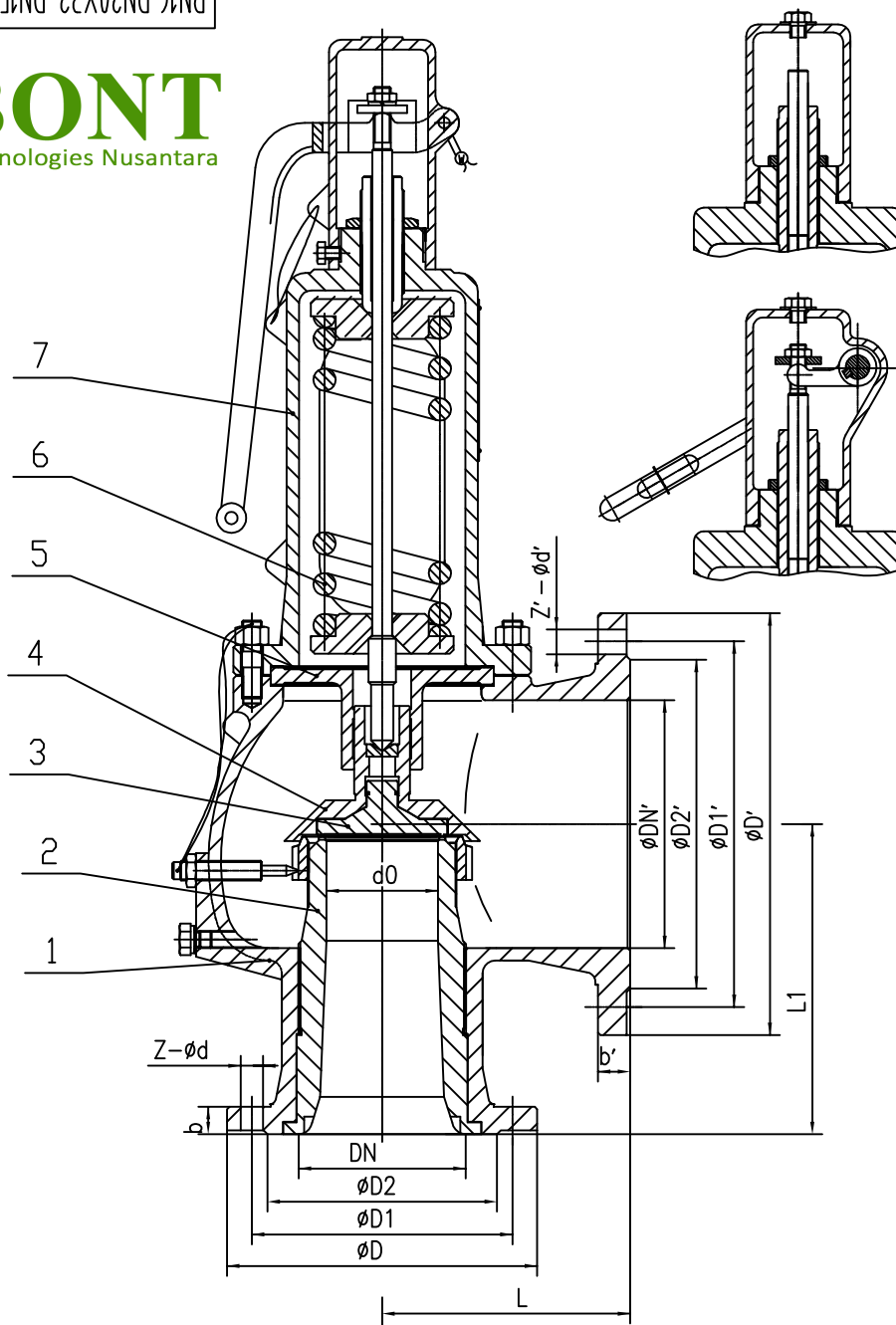


CLOSE BONNET WITH LEVER

Technical Specification

Nominal Pressure	PN16	PN40	ANSI 150	ANSI 300
Material Body	Carbon Steel			
Type	Close Lifting Device, Open Lifting Device, Open Bonnet and Gastight			
Nominal Diameter	DN 20xDN32 ~ DN150xDN250			
Working Temperature	-10°C ~ 350°C			
Connection	Flange			
Model	Full Nozzle			

PN16 DN20X32-DN150X250

BONT
Technologies Nusantara


Description

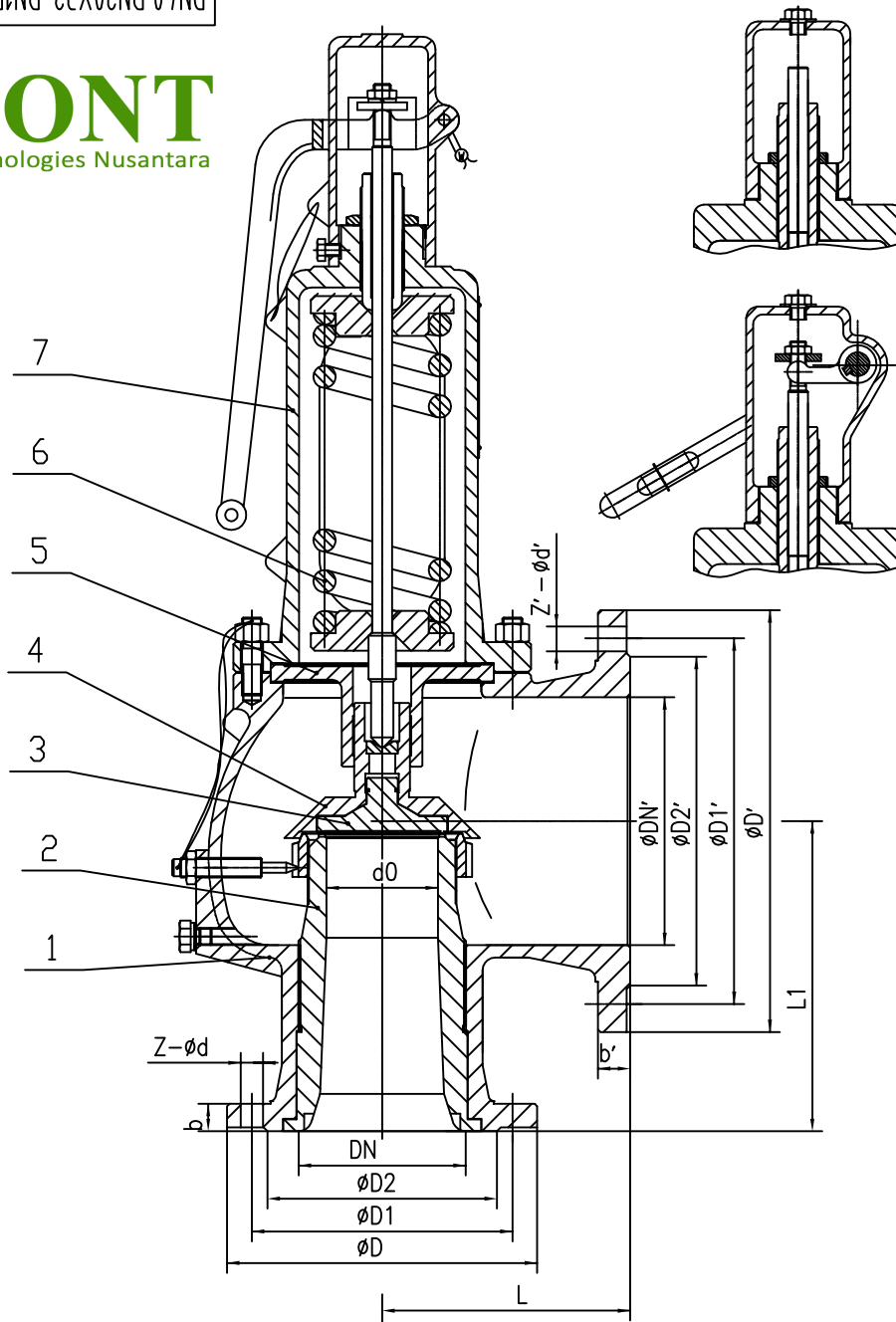
1. Design And Manuf. Acc .To DIN 3320.
2. Flange Acc. To EN 1092
3. Inspection And Testing Acc. To API 527

TAG NO.					SET PREE.					TEMP.					Q.T.Y				
Unit		mm															Remark		
Size	do	D	D1	D2	f1	b	Z-ød	DN'	D'	D1'	D2'	f1'	b'	Z-ød'	L	L1			
20X32	18	105	75	58	2	18	4-14	32	140	100	78	2	18	4-18	85	95			
25X40	20	115	85	68	2	18	4-14	40	150	110	88	3	18	4-18	100	105			
32X50	25	140	100	78	2	18	4-18	50	165	125	102	3	18	4-18	110	115			
40X65	32	150	110	88	3	18	4-18	65	185	145	122	3	18	4-18	115	140			
50X80	40	165	125	102	3	18	4-18	80	200	160	138	3	20	8-18	120	150			
65X100	50	185	145	122	3	18	4-18	100	220	180	158	3	20	8-18	140	170			
80X125	65	200	160	138	3	20	8-18	125	250	210	188	3	22	8-18	160	195			
100X150	90	220	180	158	3	20	8-18	150	285	240	212	3	22	8-22	180	220			
125X200	98	250	210	188	3	22	8-18	200	340	295	268	3	24	12-22	200	250			
150/250	125	285	240	212	3	22	8-22	250	405	355	320	3	26	12-26	225	285			

Ref No.		Part Name				Materials						
1		Body				WCB						
2		Nozzle				304						
3		Disc				304						
4		Disc Holder				20Cr13						
5		Guide				20Cr13						
6		Spring				50CrVA						
7		Bonnet				WCB						
					ASSEMBLE DRAWING							
Bailey									SAFETY VALVE			
		20170313			S				PN16 DN20X32-DN150X250			

PN40 DN20X32-DN150X250

BONT
Technologies Nusantara



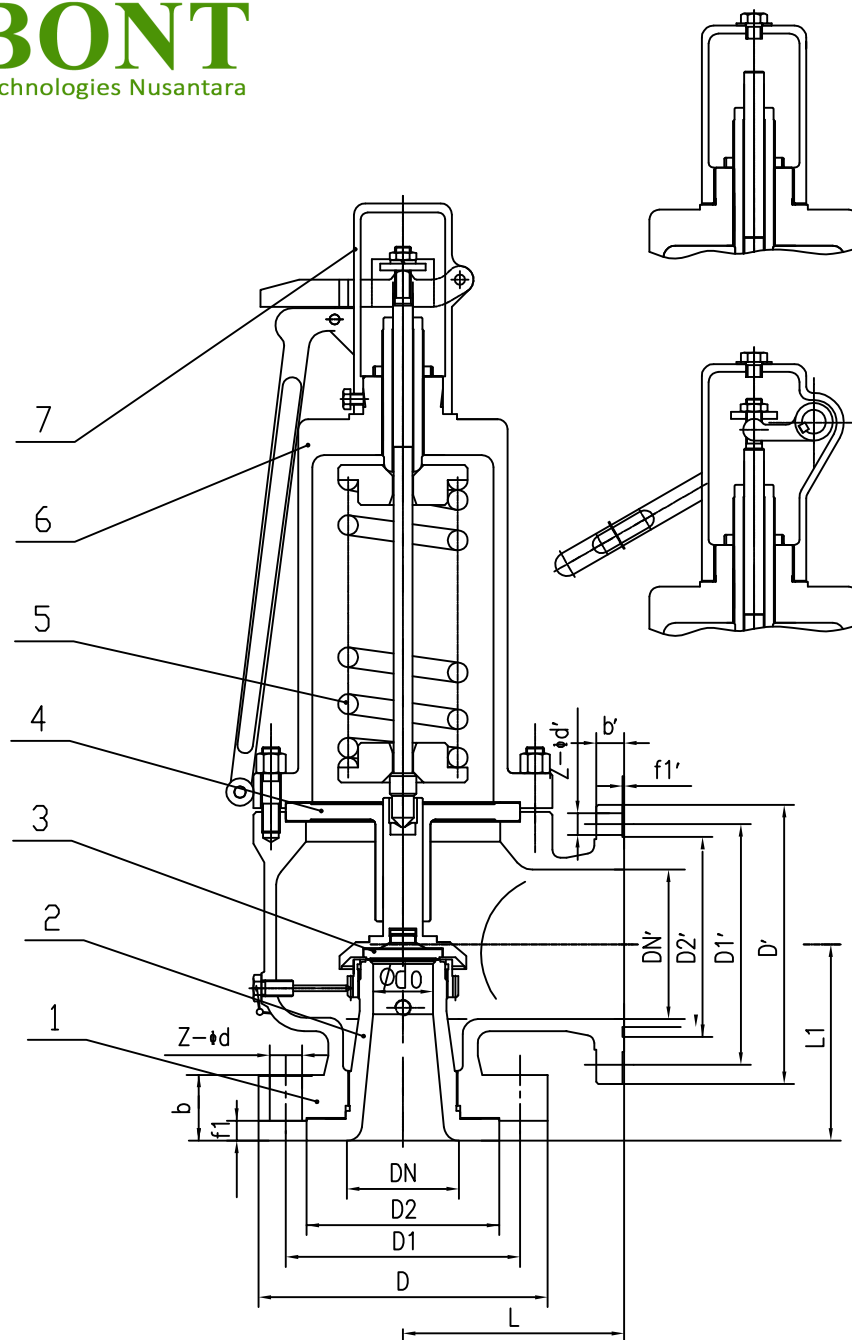
Description

1. Design And Manuf. Acc .To DIN 3320.
2. Flange Acc. To EN 1092
3. Inspection And Testing Acc. To API 527

TAG NO.				SET PREE.				TEMP.				Q.T.Y					
Unit Size	mm															Remark	
	do	D	D1	D2	f1	b	Z-ød	DN'	D'	D1'	D2'	fi'	b'	Z-ød'	L		L1
20X32	18	105	75	58	2	18	4-14	32	140	100	78	2	18	4-18	85	95	
25X40	20	115	85	68	2	18	4-14	40	150	110	88	3	18	4-18	100	105	
32X50	25	140	100	78	2	18	4-18	50	165	125	102	3	18	4-18	110	115	
40X65	32	150	110	88	3	18	4-18	65	185	145	122	3	18	4-18	115	140	
50X80	40	165	125	102	3	20	4-18	80	200	160	138	3	20	8-18	120	150	
65X100	50	185	145	122	3	22	8-18	100	220	180	158	3	20	8-18	140	170	
80X125	65	200	160	138	3	24	8-18	125	250	210	188	3	22	8-18	160	195	
100X150	90	235	190	162	3	24	8-22	150	285	240	212	3	22	8-22	180	220	
125X200	98	270	220	188	3	26	8-26	200	340	295	268	3	24	12-22	200	250	
150/250	125	300	250	218	3	28	8-26	250	405	355	320	3	26	12-26	225	285	

Ref No.	Part Name	Materials
1	Body	WCB
2	Nozzle	304
3	Disc	304
4	Disc Holder	20Cr13
5	Guide	20Cr13
6	Spring	50CrVA
7	Bonnet	WCB

				ASSEMBLE DRAWING							
								SAFETY VALVE			
Bailey											
				S							



Description

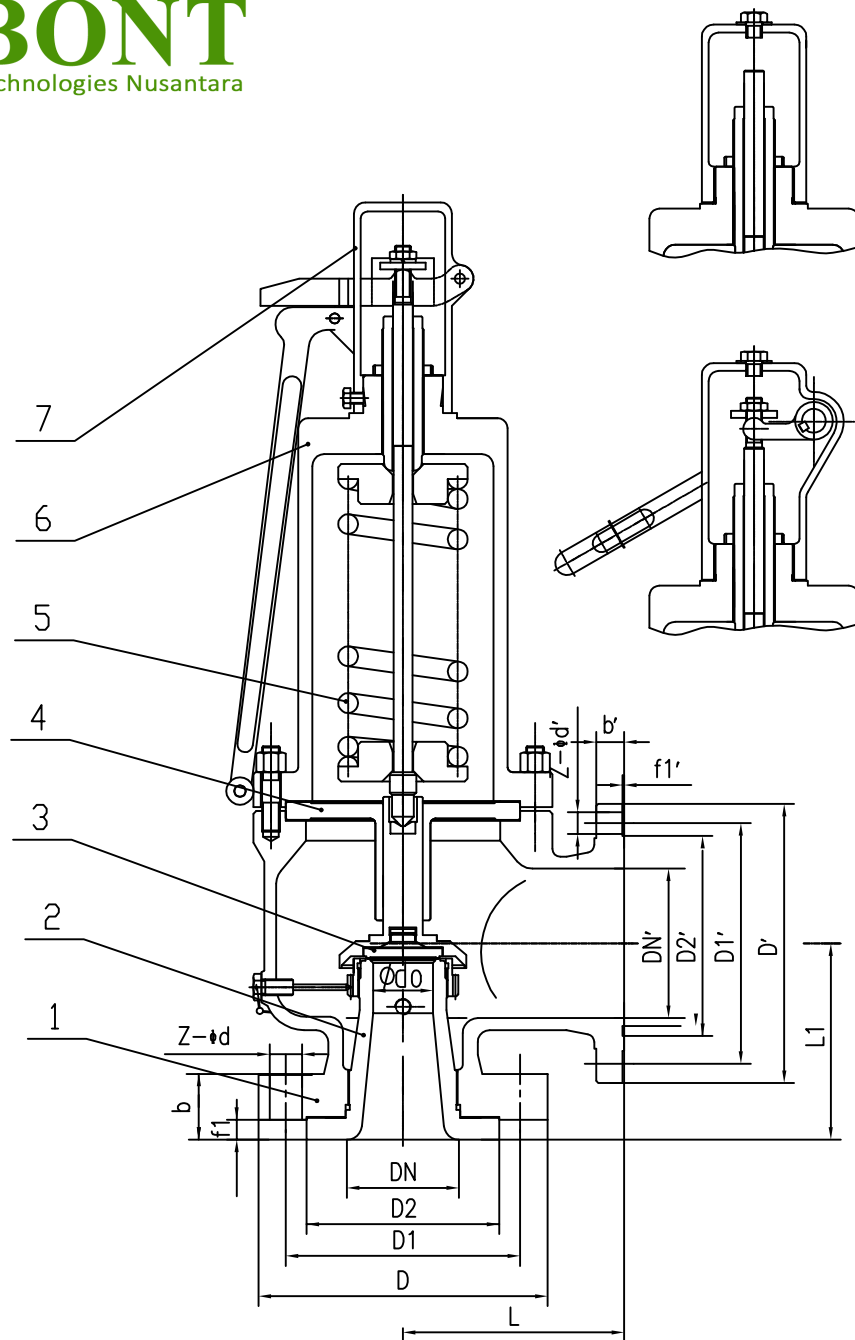
1. Design And Manuf. Acc .To API 520,ASME VIII,API526.
2. Flange Acc. To ANSI B16.5
3. Inspection And Testing Acc. To API527

TAG NO.	SET PREE.	TEMP.	Q.T.Y

Size	mm																Remark
	do	D	D1	D2	fi	b	Z- ϕ d	DN'	D'	D1'	D2'	fi'	b'	Z- ϕ d'	L	L1	
1D1-1/2	9.5	108	79.5	51	10	32	4-16	40	127	98.5	73	2	18	4-16	115	105	
1D2	9.5	108	79.5	51	10	32	4-16	50	152	120.5	92	2	19	4-19	115	105	
1-1/2F2	16.0	127	98.5	73	11	32	4-16	50	152	120.5	92	2	19	4-19	121	124	
1-1/2G3	20.3	127	98.5	73	11	32	4-16	80	190	152.5	127	2	24	4-19	121	124	
2J3	32.5	152	120.5	92	10	31	4-19	80	190	152.5	127	2	24	4-19	124	136	
3L4	48.5	190	152.5	127	10	34	4-19	100	229	190.5	157	2	24	8-19	165	156	
4P6	72.4	229	190.5	157	10	36	8-19	150	279	241.5	216	2	26	8-22	229	181	
6Q8	95.3	279	241.5	216	14	51	8-22	200	343	298.5	270	2	29	8-22	241	240	
6R10	114.6	279	241.5	216	14	51	8-22	250	406	362	324	2	31	12-25	267	240	
8T10	146	343	298.5	270	16	58	8-22	250	406	362	324	2	31	12-25	279	276	
8T12	166	343	298.5	270	2	29	8-22	300	485	432	381	2	32	12-25	350	320	

Ref No.	Part Name	Materials
1	Body	WCB
2	Nozzle	304+Ste.
3	Disc	304+Ste.
4	Guide	304
5	Spring	50CrVA
6	Bonnet	WCB
7	Cap	WCB

ASSEMBLE DRAWING										SAFETY VALVE	
Bailey										150Lb NPS1"-8"	
S											
20170313											



Description

1. Design And Manuf. Acc .To API 520,ASME VIII,API526.
2. Flange Acc. To ANSI B16.5
3. Inspection And Testing Acc. To API527

TAG NO.	SET PREE.	TEMP.	Q.T.Y

Size	mm																Remark
	do	D	D1	D2	fi	b	Z- ϕ d	DN'	D'	D1'	D2'	fi'	b'	Z- ϕ d'	L	L1	
1D1-1/2	95	124	89	51	10	32	4-19	40	127	98.5	73	2	18	4-16	115	105	
1D2	95	124	89	51	10	32	4-19	50	152	120.5	92	2	19	4-19	115	105	
1-1/2F2	160	156	114.5	73	11	32	4-22	50	152	120.5	92	2	19	4-19	121	124	
1-1/2G3	203	156	114.5	73	11	32	4-22	80	190	152.5	127	2	24	4-19	121	124	
2J3	325	165	127	92	10	31	8-19	80	190	152.5	127	2	24	4-19	124	136	
3L4	485	210	168	127	10	34	8-22	100	229	190.5	157	2	24	8-19	165	156	
4P6	724	254	200	157	10	36	8-22	150	279	241.5	216	2	26	8-22	229	181	
6Q8	953	318	270	216	14	51	12-22	200	343	298.5	270	2	29	8-22	241	240	
6R10	1146	318	270	216	14	51	12-22	250	406	362	324	2	31	12-25	267	240	
8T10	146	381	330	270	16	58	12-25	250	406	362	324	2	31	12-25	279	276	
8T12	166	381	330	270	2	42	12-25	300	485	432	381	2	32	12-25	350	320	

Ref No.	Part Name	Materials
1	Body	WCB
2	Nozzle	304+Ste.
3	Disc	304+Ste.
4	Guide	304
5	Spring	50CrVA
6	Bonnet	WCB
7	Cap	WCB

ASSEMBLE DRAWING										SAFETY VALVE	
Bailey										300Lb NPS1"-8"	
S											
20170313											

Saturated Steam (Kg/h)

(Bar)	DN20/32	DN25/40	DN32/50	DN40/65	DN50/80	DN65/100	DN80/125	DN100/150	DN125/200	DN150/250
0.6	162.0	200.0	312.6	512.1	800.2	1250.3	2113.0	4050.9	4803.1	7814.3
0.8	182.7	225.5	352.4	577.3	902.1	1409.5	2382.0	4566.7	5414.6	8809.2
1.0	203.3	251.0	392.2	642.5	1003.9	1568.7	2651.0	5082.4	6026.1	9804.1
1.3	234.2	289.2	451.9	740.3	1156.8	1807.4	3054.5	5856.1	6943.4	11296.4
1.6	265.2	327.4	511.6	838.1	1309.6	2046.2	3458.1	6629.7	7860.7	12788.8
2.0	306.4	378.3	591.1	968.5	1513.3	2364.6	3996.1	7661.2	9083.7	14778.5
2.5	358.0	442.0	690.6	1131.5	1768.0	2762.5	4668.7	8950.6	10612.5	17265.8
3.0	409.6	505.7	790.1	1294.5	2022.7	3160.5	5341.2	10240.0	12141.3	19753.0
3.5	461.2	569.4	889.6	1457.5	2277.4	3558.4	6013.8	11529.4	13670.1	22240.3
4.0	512.7	633.0	989.1	1620.5	2532.1	3956.4	6686.3	12818.7	15198.9	24727.5
4.5	564.3	696.7	1088.6	1783.5	2786.8	4354.4	7358.9	14108.1	16727.7	27214.7
5.0	615.9	760.4	1188.1	1946.5	3041.5	4752.3	8031.4	15397.5	18256.5	29702.0
5.5	667.5	824.0	1287.6	2109.6	3296.2	5150.3	8704.0	16686.9	19785.3	32189.2
6.0	719.1	887.7	1387.1	2272.6	3550.9	5548.2	9376.5	17976.3	21314.1	34676.5
6.5	770.6	951.4	1486.5	2435.6	3805.6	5946.2	10049.1	19265.7	22842.9	37163.7
7.0	822.2	1015.1	1586.0	2598.6	4060.3	6344.1	10721.6	20555.0	24371.7	39650.9
7.5	873.8	1078.7	1685.5	2761.6	4314.9	6742.1	11394.2	21844.4	25900.5	42138.2
8.0	925.4	1142.4	1785.0	2924.6	4569.6	7140.1	12066.7	23133.8	27429.3	44625.4
8.5	976.9	1206.1	1884.5	3087.6	4824.3	7538.0	12739.3	24423.2	28958.1	47112.6
9.0	1028.5	1269.8	1984.0	3250.6	5079.0	7936.0	13411.8	25712.6	30486.9	49599.9
9.5	1080.1	1333.4	2083.5	3413.6	5333.7	8333.9	14084.4	27002.0	32015.7	52087.1
10.0	1131.7	1397.1	2183.0	3576.6	5588.4	8731.9	14756.9	28291.4	33544.5	54574.4
11.0	1234.8	1524.5	2382.0	3902.6	6097.8	9527.8	16102.0	30870.1	36602.1	59548.8
12.0	1338.0	1651.8	2580.9	4228.6	6607.2	10323.7	17447.1	33448.9	39659.6	64523.3
13.0	1441.1	1779.1	2779.9	4554.6	7116.6	11119.6	18792.2	36027.7	42717.2	69497.8
14.0	1544.3	1906.5	2978.9	4880.6	7626.0	11915.6	20137.3	38606.4	45774.8	74472.3
15.0	1647.4	2033.8	3177.9	5206.6	8135.3	12711.5	21482.4	41185.2	48832.4	79446.8
16.0	1750.6	2161.2	3376.8	5532.6	8644.7	13507.4	22827.5	43764.0	51890.0	84421.2
17.0	1853.7	2288.5	3575.8	5858.6	9154.1	14303.3	24172.6	46342.7	54947.6	
18.0	1956.9	2415.9	3774.8	6184.6	9663.5	15099.2	25517.7	48921.5	58005.2	
19.0	2060.0	2543.2	3973.8	6510.7	10172.9	15895.1	26862.8	51500.3	61062.8	
20.0	2163.2	2670.6	4172.8	6836.7	10682.3	16691.1	28207.9	54079.0	64120.4	
21.0	2266.3	2797.9	4371.7	7162.7	11191.7	17487.0	29553.0	56657.8		
22.0	2369.5	2925.3	4570.7	7488.7	11701.1	18282.9	30898.1	59236.6		
23.0	2472.6	3052.6	4769.7	7814.7	12210.4	19078.8	32243.2	61815.3		
24.0	2575.8	3180.0	4968.7	8140.7	12719.8	19874.7	33588.3	64394.1		
25.0	2678.9	3307.3	5167.7	8466.7	13229.2	20670.6	34933.4	66972.9		
26.0	2782.1	3434.6	5366.6	8792.7	13738.6	21466.6	36278.5			
27.0	2885.2	3562.0	5565.6	9118.7	14248.0	22262.5	37623.6			
28.0	2988.4	3689.3	5764.6	9444.7	14757.4	23058.4	38968.7			
29.0	3091.5	3816.7	5963.6	9770.7	15266.8	23854.3	40313.8			

Air (Kg/h,20℃)

(Bar)	20/32	25/40	32/50	40/65	50/80	65/100	80/125	100/150	125/200	150/250
0.6	270.3	333.7	521.4	854.3	1334.8	2085.6	3524.6	6757.3	8011.9	13034.85
0.8	1595.7	1970.0	3078.1	5043.2	7880.0	12312.4	20808.0	39892.3	47299.5	76952.73
1	341.9	422.1	659.6	1080.7	1688.6	2638.4	4458.9	8548.3	10135.6	16489.87
1.3	395.7	488.5	763.2	1250.5	1953.9	3053.0	5159.5	9891.7	11728.3	19081.14
1.6	449.4	554.8	866.9	1420.3	2219.3	3467.6	5860.2	11235.0	13321.1	21672.4
2	521.0	643.3	1005.1	1646.8	2573.0	4020.4	6794.5	13026.1	15444.7	25127.42
2.5	610.6	753.8	1177.8	1929.8	3015.3	4711.4	7962.3	15264.9	18099.3	29446.2
3	700.2	864.4	1350.6	2212.8	3457.5	5402.4	9130.0	17503.8	20753.8	33764.97
3.5	789.7	974.9	1523.3	2495.9	3899.8	6093.4	10297.8	19742.6	23408.4	38083.75
4	879.3	1085.5	1696.1	2778.9	4342.0	6784.4	11465.6	21981.5	26063.0	42402.52
4.5	968.8	1196.1	1868.9	3061.9	4784.3	7475.4	12633.4	24220.3	28717.5	46721.3
5	1058.4	1306.6	2041.6	3345.0	5226.5	8166.4	13801.2	26459.2	31372.1	51040.07
5.5	1147.9	1417.2	2214.4	3628.0	5668.7	8857.4	14969.0	28698.0	34026.6	55358.85
6	1237.5	1527.7	2387.1	3911.0	6111.0	9548.4	16136.8	30936.9	36681.2	59677.63
6.5	1327.0	1638.3	2559.9	4194.1	6553.2	10239.4	17304.6	33175.7	39335.8	63996.4
7	1416.6	1748.9	2732.6	4477.1	6995.5	10930.4	18472.4	35414.6	41990.3	68315.18
7.5	1506.1	1859.4	2905.4	4760.1	7437.7	11621.4	19640.2	37653.4	44644.9	72633.95
8	1595.7	1970.0	3078.1	5043.2	7880.0	12312.4	20808.0	39892.3	47299.5	76952.73
8.5	1685.2	2080.6	3250.9	5326.2	8322.2	13003.4	21975.8	42131.1	49954.0	81271.5
9	1774.8	2191.1	3423.6	5609.2	8764.4	13694.4	23143.6	44370.0	52608.6	85590.28
9.5	1864.4	2301.7	3596.4	5892.3	9206.7	14385.4	24311.4	46608.9	55263.1	89909.05
10	1953.9	2412.2	3769.1	6175.3	9648.9	15076.5	25479.2	48847.7	57917.7	94227.83
11	2133.0	2633.4	4114.6	6741.4	10533.4	16458.5	27814.8	53325.4	63226.8	102865.4
12	2312.1	2854.5	4460.1	7307.5	11417.9	17840.5	30150.4	57803.1	68535.9	111502.9
13	2491.2	3075.6	4805.6	7873.5	12302.4	19222.5	32486.0	62280.8	73845.1	120140.5
14	2670.3	3296.7	5151.1	8439.6	13186.9	20604.5	34821.6	66758.5	79154.2	128778
15	2849.4	3517.8	5496.6	9005.7	14071.4	21986.5	37157.2	71236.2	84463.3	137415.6
16	3028.6	3739.0	5842.1	9571.7	14955.8	23368.5	39492.8	75713.9	89772.4	146053.1
17	3207.7	3960.1	6187.6	10137.8	15840.3	24750.5	41828.4	80191.7	95081.6	
18	3386.8	4181.2	6533.1	10703.9	16724.8	26132.5	44164.0	84669.4	100390.7	
19	3565.9	4402.3	6878.6	11269.9	17609.3	27514.5	46499.5	89147.1	105699.8	
20	3745.0	4623.4	7224.1	11836.0	18493.8	28896.5	48835.1	93624.8	111008.9	
21	3924.1	4844.6	7569.6	12402.1	19378.3	30278.5	51170.7	98102.5		
22	4103.2	5065.7	7915.1	12968.2	20262.8	31660.6	53506.3	102580.2		
23	4282.3	5286.8	8260.6	13534.2	21147.2	33042.6	55841.9	107057.9		
24	4461.4	5507.9	8606.1	14100.3	22031.7	34424.6	58177.5	111535.6		
25	4640.5	5729.1	8951.6	14666.4	22916.2	35806.6	60513.1	116013.3		
26	4819.6	5950.2	9297.1	15232.4	23800.7	37188.6	62848.7			
27	4998.7	6171.3	9642.6	15798.5	24685.2	38570.6	65184.3			
28	5177.9	6392.4	9988.1	16364.6	25569.7	39952.6	67519.9			
29	5356.965	6613.537	10333.65	16930.66	26454.15	41334.61	69855.49			
30	5536.073	6834.659	10679.15	17496.73	27338.63	42716.62	72191.08			
31	5715.182	7055.78	11024.66	18062.8	28223.12	44098.62	74526.68			
32	5894.29	7276.901	11370.16	18628.87	29107.6	45480.63	76862.27			
33	6073.398	7498.023	11715.66	19194.94	29992.09					
34	6252.506	7719.144	12061.16	19761.01	30876.58					
35	6431.615	7940.265	12406.66	20327.08	31761.06					
36	6610.723	8161.386	12752.17	20893.15	32645.55					
37	6789.831	8382.508	13097.67	21459.22	33530.03					
38	6968.94	8603.629	13443.17	22025.29	34414.52					
39	7148.048	8824.75	13788.67	22591.36	35299					
40	7327.156	9045.872	14134.17	23157.43	36183.49					

Water, 20°C, 1000Kg/m³

(Bar)	20/32	25/40	32/50	40/65	50/80	65/100	80/125	100/150	125/200	150/250
0.6	3161.4	3903.0	6098.4	9991.6	15611.8	24393.4	41224.9	79034.7	93709.8	152459
0.8	3650.5	4506.7	7041.8	11537.3	18027.0	28167.1	47602.4	91261.5	108206.8	176044.5
1	4081.3	5038.7	7872.9	12899.0	20154.7	31491.8	53221.1	102033.4	120978.9	196823.7
1.3	4653.4	5745.0	8976.5	14707.2	22980.0	35906.2	60681.4	116336.0	137937.2	224413.6
1.6	5162.5	6373.5	9958.6	16316.1	25494.0	39834.3	67320.0	129063.2	153027.5	248964.5
2	5771.9	7125.8	11134.0	18242.0	28503.1	44536.1	75266.1	144297.0	171090.0	278350.8
2.5	6453.2	7966.9	12448.2	20395.2	31867.5	49792.9	84150.0	161329.0	191284.4	311205.6
3	7069.1	8727.3	13636.3	22341.8	34909.1	54545.4	92181.7	176727.1	209541.6	340908.7
3.5	7635.5	9426.5	14728.9	24131.9	37706.1	58915.8	99567.6	190887.1	226330.8	368223.5
4	8162.7	10077.4	15745.9	25798.1	40309.5	62983.6	106442.3	204066.8	241957.8	393647.5
4.5	8657.8	10688.7	16701.0	27363.0	42754.7	66804.2	112899.1	216445.6	256635.0	417526.2
5	9126.1	11266.8	17604.4	28843.1	45067.4	70417.8	119006.1	228153.7	270517.0	440111.2
5.5	9571.6	11816.8	18463.7	30250.9	47267.1	73854.8	124814.6	239289.6	283720.6	461592.6
6	9997.2	12342.2	19284.7	31596.1	49368.9	77138.8	130364.6	249929.8	296336.5	482117.7
6.5	10405.4	12846.2	20072.2	32886.2	51384.7	80288.6	135687.8	260135.2	308436.9	501804
7	10798.2	13331.1	20829.9	34127.7	53324.5	83319.5	140809.9	269955.1	320080.0	520746.6
7.5	11177.2	13799.0	21561.0	35325.5	55196.1	86243.8	145752.1	279430.0	331314.3	539024
8	11543.8	14251.6	22268.1	36484.0	57006.2	89072.3	150532.1	288594.1	342180.0	556701.6
8.5	11899.0	14690.2	22953.4	37606.8	58760.7	91813.6	155164.9	297476.0	352711.0	573834.8
9	12244.0	15116.1	23618.8	38697.1	60464.2	94475.4	159663.4	306100.3	362936.7	590471.2
9.5	12579.5	15530.3	24266.1	39757.5	62121.1	97064.2	164038.6	314488.1	372882.0	606651.5
10	12906.3	15933.7	24896.5	40790.3	63734.9	99585.8	168300.0	322658.0	382568.8	622411.3
11	13536.3	16711.4	26111.6	42781.3	66845.7	104446.5	176514.5	338406.6	401241.6	652790.5
12	14138.2	17454.5	27272.7	44683.6	69818.1	109090.8	184363.4	353454.1	419083.2	681817.4
13	14715.5	18167.2	28386.3	46508.1	72669.0	113545.3	191891.5	367886.7	436195.6	709658
14	15271.0	18853.0	29457.9	48263.8	75412.2	117831.5	199135.3	381774.1	452661.5	736447
15	15806.9	19514.8	30491.8	49957.8	78059.0	121967.2	206124.6	395173.7	468549.2	762295
16	16325.3	20154.7	31491.8	51596.2	80619.0	125967.2	212884.5	408133.7	483915.5	787294.9
17	16827.8	20775.0	32461.0	53184.1	83100.2	129844.0	219436.4	420694.6	498808.7	
18	17315.6	21377.3	33402.1	54726.0	85509.4	133608.4	225798.2	432891.1	513269.9	
19	17790.1	21963.1	34317.4	56225.6	87852.5	137269.6	231985.6	444753.4	527334.7	
20	18252.3	22533.7	35208.9	57686.3	90134.8	140835.6	238012.2	456307.3	541034.0	
21	18703.0	23090.2	36078.4	59110.8	92360.7	144313.5	243889.9	467575.9		
22	19143.2	23633.5	36927.4	60501.9	94534.2	147709.6	249629.3	478579.2		
23	19573.4	24164.7	37757.3	61861.6	96658.8	151029.4	255239.6	489335.1		
24	19994.4	24684.4	38569.4	63192.1	98737.7	154277.7	260729.3	499859.6		
25	20406.7	25193.4	39364.7	64495.2	100773.7	157459.0	266105.7	510167.1		
26	20810.8	25692.4	40144.3	65772.5	102769.5	160577.3	271375.6			
27	21207.248	26181.788	40909.044	67025.378	104727.15	163636.18	276545.14			
28	21596.405	26662.228	41659.731	68255.304	106648.91	166638.92	281619.78			
29	21978.672	27134.162	42397.129	69463.456	108536.65	169588.52	286604.59			
30	22354.403	27598.028	43121.919	70650.951	110392.11	172487.67	291504.17			
31	22723.922	28054.225	43834.726	71818.815	112216.9	175338.9	296322.75			
32	23087.528	28503.121	44536.126	72967.989	114012.48	178144.5	301064.21			
33	23445.495	28945.056	45226.65	74099.343	115780.22					
34	23798.079	29380.344	45906.788	75213.681	117521.38					
35	24145.514	29809.277	46576.995	76311.749	119237.11					
36	24488.021	30232.125	47237.695	77394.24	120928.5					
37	24825.803	30649.139	47889.28	78461.797	122596.56					
38	25159.05	31060.556	48532.118	79515.022	124242.22					
39	25487.94	31466.593	49166.552	80554.478	125866.37					
40	25812.641	31867.458	49792.903	81580.692	127469.83					