

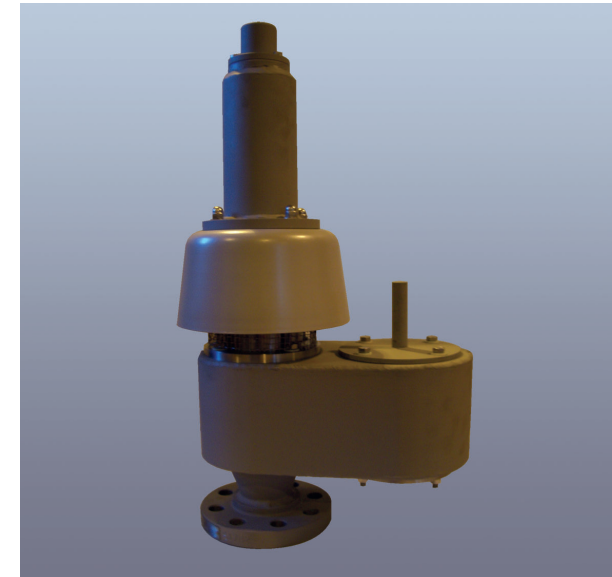
B100s Series spring loaded open vented Pressure & Vacuum Relief Valve

Flow in m³/hr

Size	Set Pressure mbarg						Set Vacuum mbarg						
	70	100	250	500	750	1000	2	5	10	25	50	60	
2"(50mm) OVER PRESS	10%	153	175	283	403	462	525	32	50	71	113	159	174
	20%	236	270	437	624	717	817	43	68	96	151	214	234
	50%	349	399	651	940	1092	1254	73	115	163	258	363	400
3"(80mm) OVER PRESS	10%	305	462	598	801	933	1075	72	113	160	255	355	390
	20%	470	712	925	1246	1460	1688	96	152	215	340	483	527
	50%	697	1059	1392	1907	2265	2654	163	260	369	578	828	902
4"(100mm) OVER PRESS	10%	590	737	1060	1469	1831	2066	128	200	285	450	630	700
	20%	909	1137	1643	2293	2876	3262	172	271	385	607	853	940
	50%	1351	1695	2487	3544	4520	5198	293	465	656	1027	1456	1600
6"(150mm) OVER PRESS	10%	1275	3843	5765	3274	3950	4536	284	452	644	1014	1427	1574
	20%	1970	2541	3703	5186	6311	7293	385	610	865	1360	1927	2114
	50%	2957	3843	5765	8347	10386	12193	657	1085	1457	2300	3300	3615
8"(200mm) OVER PRESS	10%	2310	3045	3680	4737	5955	7137	509	805	1129	1798	2545	2800
	20%	3581	4736	5799	7570	9601	11576	686	1085	1535	2420	3424	3750
	50%	5422	7241	9199	12462	16162	19779	1173	1856	2617	4156	5786	6410
10"(250mm) OVER PRESS	10%	3565	3876	5135	6972	9039	10924	800	1255	1389	2780	3925	4293
	20%	5542	6051	8143	11221	14671	17829	1013	1700	2400	3790	5350	5857
	50%	8464	9353	13135	18805	25110	30928	1823	2900	4087	6423	8345	9997
12"(300mm) OVER PRESS	10%	4003	4332	5935	8529	11247	13747	1155	1780	2667	3987	5749	6200
	20%	6236	6781	9447	13779	18320	22507	1548	2440	3450	5489	7698	8448
	50%	9578	10557	15338	23314	31626	39340	2643	4150	5868	9230	13090	14210

The B100 Series ensures that tanks and vessels are kept safe during periods of excessive pressure and vacuum caused by filling and emptying of product and changes in temperature due to climatic or external fire sources.

OPEN VENT



- Open or Closed vent available
- Standard Pressure settings + 80 mbarg to 2 barg
- Standard Vacuum settings - 2 mbarg to - 0.8 barg
- Size range 2" (50 mm) - 12" (300 mm)
- Standard body materials - Carbon steel, Stainless steel
- Standard trim material - Stainless steel
- Diaphragm material - FEP
- Removable seats
- Standard full form flanges - ANSI / DIN
- Lightweight design
- **Non standard applications - Consult factory**



FEATURES

Low cost maintenance

Lightweight design provides easy handling whilst interchangeable components ensure standard parts are easily replaced.

Testing / Quality

All products are factory tested and fully certified.

Self Draining

All products are designed so that any condensate drains away from all seating areas.

Low leakage

Standard seating design ensures minimum leakage of less than 1 scfh at 90% of set pressure.

Internal Parts

Internal parts are stainless steel as standard. Non standard materials available upon request.

Connections

All valves are supplied with full form flanges to meet individual requirements. Other connections are available upon request.

Non Standard Applications

There are numerous options available for special applications. Exotic materials such as Hastelloy, Monel and various plastics can be offered to suit the most hazardous of environments. Special coatings can be applied for extreme service. For low temperature duties, internal parts can be PTFE coated to prevent seizure.

See separate section in catalogue.

* All products are subject to continuous development and subsequently 3B Controls reserve the right to change specifications outlined in this catalogue without notification.

MATERIALS

Body

Carbon Steel
Stainless Steel

Diaphragm

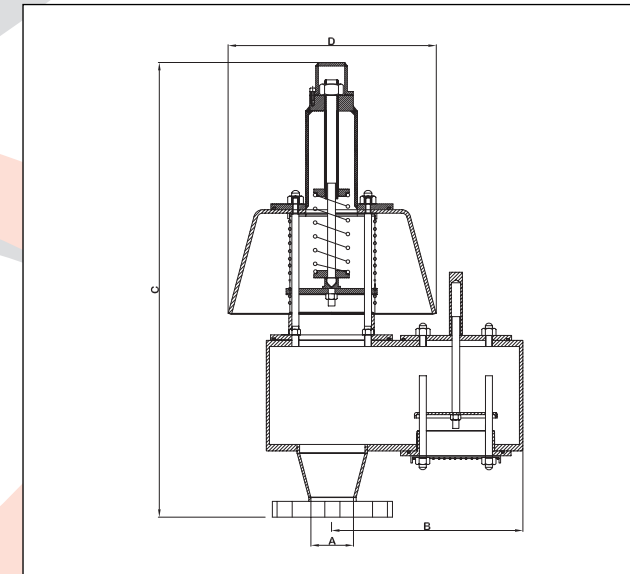
F.E.P
Others consult factory

Internals

Stainless Steel

Flanges

ANSI 125 ANSI 150 RF
DIN Standard flanges



DIMENSIONS

NOM SIZE	A	B	C	D
50 (2")	54	252	568	208
80 (3")	84	308	613	305
100 (4")	108	355	663	380
150 (6")	161	516	718	535
200 (8")	211	576	778	610
250 (10")	255	701	840	680
300 (12")	305	741	914	700



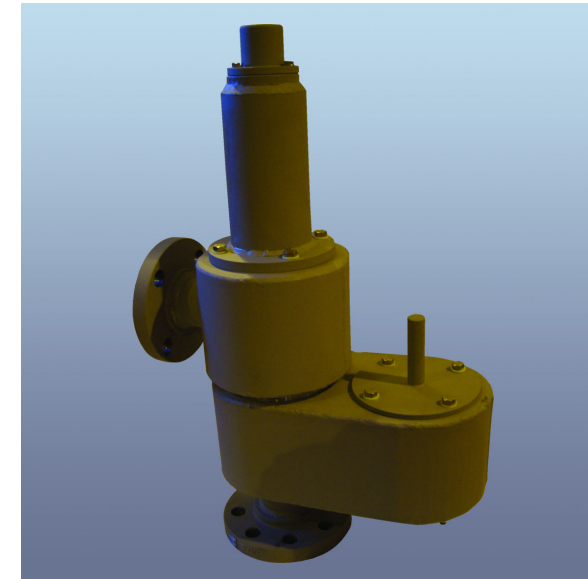
B100s Series spring loaded closed vented Pressure & Vacuum Relief Valve

Flow in m³/hr

Size	Set Pressure mbarg						Set Vacuum mbarg						
	70	100	250	500	750	1000	2	5	10	25	50	60	
2"(50mm) OVER PRESS	10%	112	125	206	269	336	393	32	50	71	113	159	174
	20%	172	193	317	416	522	612	43	68	96	151	214	234
	50%	255	285	473	627	794	941	73	115	163	258	363	400
3"(80mm) OVER PRESS	10%	254	291	449	619	767	818	72	113	160	255	355	390
	20%	392	448	694	963	1199	1285	96	152	215	340	483	527
	50%	581	666	1044	1474	1862	2020	163	260	369	578	828	902
4"(100mm) OVER PRESS	10%	433	498	784	1049	1271	1432	128	200	285	450	630	700
	20%	666	768	1216	1638	1997	2261	172	271	385	607	853	940
	50%	990	1145	1840	2531	3139	3603	293	465	656	1027	1456	1600
6"(150mm) OVER PRESS	10%	1020	1312	1690	2273	2775	3187	284	452	644	1014	1427	1574
	20%	1575	2033	2645	3601	4435	5124	385	610	865	1360	1927	2114
	50%	2365	3074	4118	5796	7298	8567	657	1085	1457	2300	3300	3615
8"(200mm) OVER PRESS	10%	1621	1903	2657	3618	4990	5900	509	805	1129	1798	2545	2800
	20%	2513	2960	4188	5783	8044	9569	686	1085	1535	2420	3424	3750
	50%	3805	4525	6643	9519	13541	16351	1173	1856	2617	4156	5786	6410
10"(250mm) OVER PRESS	10%	2575	3299	4201	5705	7208	8711	800	1255	1389	2780	3925	4293
	20%	4002	5151	6662	9181	11699	14218	1013	1700	2400	3790	5350	5857
	50%	6113	7963	10747	15386	20025	24664	1823	2900	4087	6423	8345	9997
12"(300mm) OVER PRESS	10%	3503	3739	4920	6888	8857	10826	1155	1780	2667	3987	5749	6200
	20%	5456	5852	7831	11129	14427	17725	1548	2440	3450	5489	7698	8448
	50%	8381	9110	12756	18830	24905	30980	2643	4150	5868	9230	13090	14210

The B100 Series ensures that tanks and vessels are kept safe during periods of excessive pressure and vacuum caused by filling and emptying of product and changes in temperature due to climatic or external fire sources.

CLOSED VENT



- Open or Closed vent available
- Standard Pressure settings + 80 mbarg to 1 barg
- Standard Vacuum settings - 2 mbarg to - 60 mbarg
- Size range 2" (50 mm) - 12" (300 mm)
- Standard body materials - Carbon steel, Stainless steel
- Standard trim material - Stainless steel
- Diaphragm material - FEP
- Removable seats
- Standard full form flanges - ANSI / DIN
- Lightweight design
- **Non standard applications - Consult factory**



3B CONTROLS

3B CONTROLS



PRESSURE & VACUUM RELIEF VALVES

PRESSURE & VACUUM RELIEF VALVES

FEATURES

Low cost maintenance

Lightweight design provides easy handling whilst interchangeable components ensure standard parts are easily replaced.

Testing / Quality

All products are factory tested and fully certified.

Self Draining

All products are designed so that any condensate drains away from all seating areas.

Low leakage

Standard seating design ensures minimum leakage of less than 1 scfh at 90% of set pressure.

Internal Parts

Internal parts are stainless steel as standard. Non standard materials available upon request.

Connections

All valves are supplied with full form flanges to meet individual requirements. Other connections are available upon request.

Non Standard Applications

There are numerous options available for special applications. Exotic materials such as Hastelloy, Monel and various plastics can be offered to suit the most hazardous of environments. Special coatings can be applied for extreme service. For low temperature duties, internal parts can be PTFE coated to prevent seizure.

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MATERIALS

Body

Carbon Steel
Stainless Steel

Diaphragm

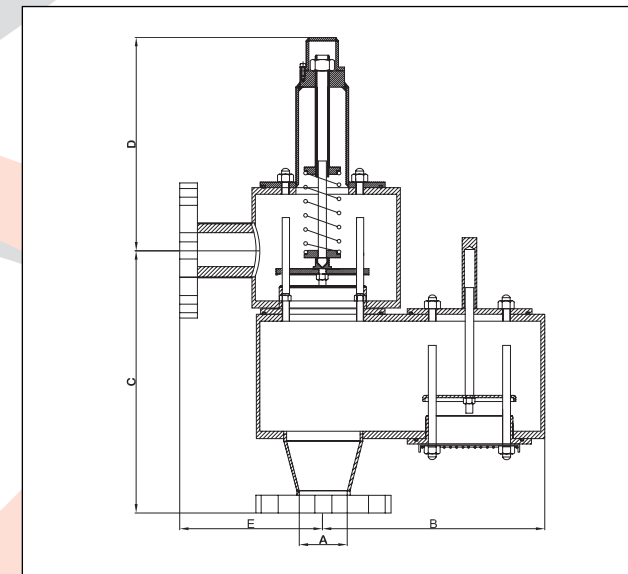
F.E.P
Others consult factory

Internals

Stainless Steel

Flanges

ANSI 125 ANSI 150 RF
DIN Standard flanges



DIMENSIONS

NOM SIZE	A	B	C	D	E
50 (2")	54	252	288	314	135
80 (3")	84	308	328	325	160
100 (4")	108	355	410	352	185
150 (6")	161	516	471	355	251
200 (8")	211	576	542	393	289
250 (10")	255	701	623	490	332
300 (12")	305	741	716	540	382

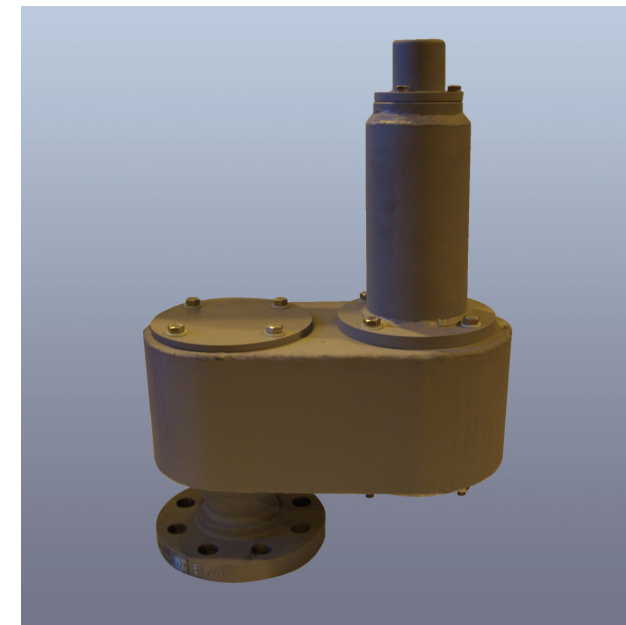


B200s Series Vacuum Relief Valve

Flow in m³/hr

Size	Set Vacuum mbarg						
	70	100	250	350	500	700	
2"(50mm) OVER PRESS	10%	112	113	174	200	242	290
	20%	172	174	268	310	374	450
	50%	331	334	426	491	593	685
3"(80mm) OVER PRESS	10%	198	231	372	433	522	616
	20%	305	356	575	672	812	963
	50%	487	600	940	1096	1285	1585
4"(100mm) OVER PRESS	10%	354	430	648	774	944	1030
	20%	545	664	1005	1203	1424	1617
	50%	892	1031	1611	1884	2278	2542
6"(150mm) OVER PRESS	10%	774	915	1419	1759	2005	2402
	20%	1196	1418	2222	2678	3177	3838
	50%	1996	2352	3624	4375	5216	6315
8"(200mm) OVER PRESS	10%	1386	1599	2668	2975	3434	4201
	20%	2149	2486	4204	4718	5488	6773
	50%	3425	4425	6669	7615	9035	11401
10"(250mm) OVER PRESS	10%	2094	2498	4022	4597	5460	6899
	20%	3256	3900	6377	7341	8787	11198
	50%	5290	6256	10439	12242	14946	19403
12"(300mm) OVER PRESS	10%	3002	4273	5623	6523	7873	10123
	20%	4677	6688	8950	10457	12719	16488
	50%	7663	9110	14578	17355	21521	28463

The B200 Series ensures that tanks and vessels are kept safe during periods of excessive vacuum caused by emptying of product and changes in temperature due to climatic changes.



- Standard Vacuum settings - 80 mbarg to - 0.8 barg
- Size range 2" (50 mm) – 12" (300 mm)
- Standard body materials – Carbon steel, Stainless steel
- Standard trim material – Stainless steel
- Diaphragm material - FEP
- Removable seats
- Standard full form flanges – ANSI / DIN
- Lightweight design
- **Non standard applications – Consult factory**



3B CONTROLS

3B CONTROLS



FEATURES

Low cost maintenance

Lightweight design provides easy handling whilst interchangeable components ensure standard parts are easily replaced.

Testing / Quality

All products are factory tested and fully certified.

Self Draining

All products are designed to ensure that condensate drains away from all seating areas.

Low leakage

Standard seating design ensures minimum leakage of less than 1 scfh at 90% of set pressure.

Internal Parts

Internal parts are stainless steel as standard. Non standard materials available upon request.

Connections

All valves are supplied with full form flanges to meet individual requirements. Other connections are available upon request.

Non Standard Applications

There are numerous options available for special applications. Exotic materials such as Hastelloy, Monel and various plastics can be offered to suit the most hazardous of environments. Special coatings can also be applied for extreme service. For low temperature duties, internal parts can be PTFE coated to prevent seizure.

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MATERIALS

Body

Carbon Steel
Stainless Steel

Diaphragm

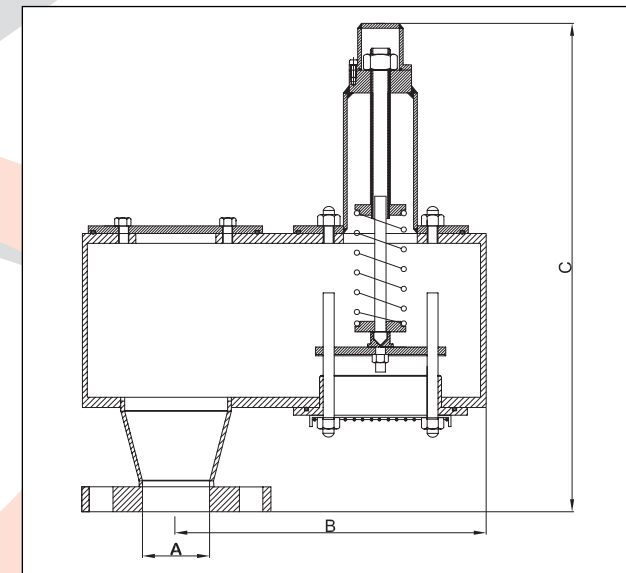
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Others consult factory

Internals

Stainless Steel

Flanges

ANSI 125 ANSI 150 RF
DIN Standard flanges



DIMENSIONS

NOM SIZE	A	B	C
50 (2")	54	252	250
80 (3")	84	308	287
100 (4")	108	355	330
150 (6")	161	516	380
200 (8")	211	576	437
250 (10")	255	701	503
300 (12")	305	741	578



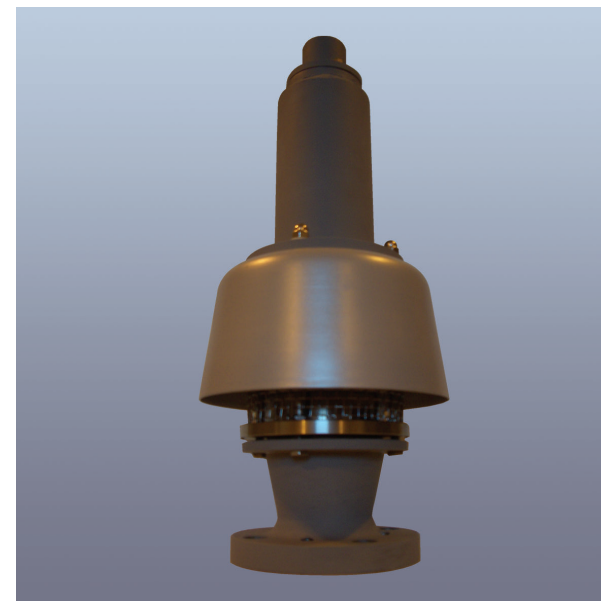
B300s Series spring loaded open vented Pressure Relief Valve

Flow in m³/hr

Size		Set Pressure mbarg					
		70	100	250	500	750	1000
2"(50mm)	OVER PRESS 10%	153	175	283	403	462	525
	20%	236	270	437	624	717	817
	50%	349	399	651	940	1092	1254
3"(80mm)	OVER PRESS 10%	305	462	598	801	933	1075
	20%	470	712	925	1246	1460	1688
	50%	697	1059	1392	1907	2265	2654
4"(100mm)	OVER PRESS 10%	590	737	1060	1469	1831	2066
	20%	909	1137	1643	2293	2876	3262
	50%	1351	1695	2487	3544	4520	5198
6"(150mm)	OVER PRESS 10%	1275	3843	5765	3274	3950	4536
	20%	1970	2541	3703	5186	6311	7293
	50%	2957	3843	5765	8347	10386	12193
8"(200mm)	OVER PRESS 10%	2310	3045	3680	4737	5955	7137
	20%	3581	4736	5799	7570	9601	11576
	50%	5422	7241	9199	12462	16162	19779
10"(250mm)	OVER PRESS 10%	3565	3876	5135	6972	9039	10924
	20%	5542	6051	8143	11221	14671	17829
	50%	8464	9353	13135	18805	25110	30928
12"(300mm)	OVER PRESS 10%	4003	4332	5935	8529	11247	13747
	20%	6236	6781	9447	13779	18320	22507
	50%	9578	10557	15338	23314	31626	39340

The B300 Series ensures that tanks and vessels are kept safe during periods of excessive pressure caused by filling of product and changes in temperature due to climatic or external fire sources.

OPEN VENT



- Open or Closed vent available
- Closed vent can operate as a vacuum relief valve
- Standard Pressure settings + 90 mbarg to 1 barg
- Size range 2" (50 mm) – 12" (300 mm)
- Standard body materials – Carbon steel, Stainless steel
- Standard trim material – Stainless steel
- Diaphragm material - FEP
- Removable seats
- Standard full form flanges – ANSI / DIN
- Lightweight design
- **Non standard applications – Consult factory**



FEATURES

Low cost maintenance

Lightweight design provides easy handling whilst interchangeable components ensure standard parts are easily replaced.

Testing / Quality

All products are factory tested and fully certified.

Self Draining

All products are designed to ensure that condensate drains away from all seating areas.

Low leakage

Standard seating design ensures minimum leakage of less than 1 scfh at 90% of set pressure.

Internal Parts

Internal parts are stainless steel as standard. Non standard materials available upon request.

Connections

All valves are supplied with full form flanges to meet individual requirements. Other connections are available upon request.

Non Standard Applications

There are numerous options available for special applications. Exotic materials such as Hastelloy, Monel and various plastics can be offered to suit the most hazardous of environments. Special coatings can also be applied for extreme service. For low temperature duties, internal parts can be PTFE coated to prevent seizure.

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MATERIALS

Body

Aluminium
Carbon Steel
Stainless Steel

Diaphragm

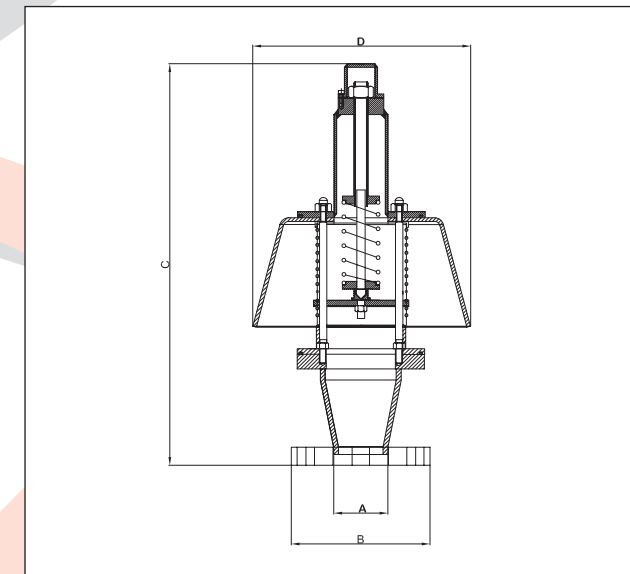
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Others consult factory

Internals

Stainless Steel

Flanges

ANSI 125 ANSI 150 RF
DIN Standard flanges



DIMENSIONS

NOM SIZE	A	B	C	D
50 (2")	54	152	453	208
80 (3")	84	190	498	305
100 (4")	108	229	548	380
150 (6")	161	279	603	535
200 (8")	211	343	663	610
250 (10")	255	406	729	680
300 (12")	305	483	802	700



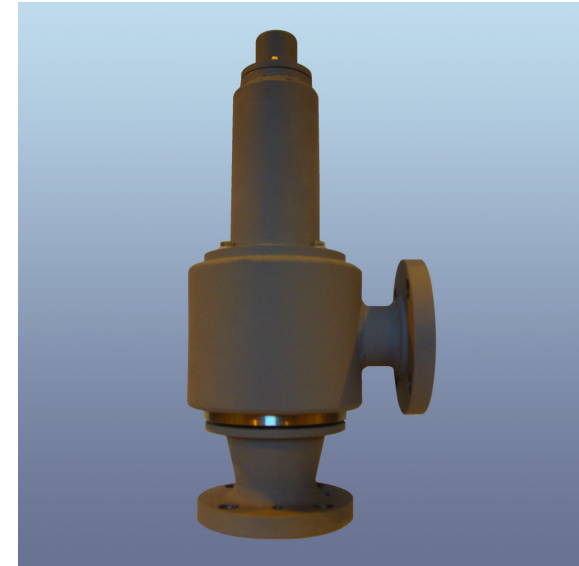
B300s Series spring loaded closed vented Pressure Relief Valve

Flow in m³/hr

Size		Set Pressure mbarg					
		70	100	250	500	750	1000
2"(50mm)	OVER PRESS 10%	112	125	206	269	336	393
	20%	172	193	317	416	522	612
	50%	255	285	473	627	794	941
3"(80mm)	OVER PRESS 10%	254	291	449	619	767	818
	20%	392	448	694	963	1199	1285
	50%	581	666	1044	1474	1862	2020
4"(100mm)	OVER PRESS 10%	433	498	784	1049	1271	1432
	20%	666	768	1216	1638	1997	2261
	50%	990	1145	1840	2531	3139	3603
6"(150mm)	OVER PRESS 10%	1020	1312	1690	2273	2775	3187
	20%	1575	2033	2645	3601	4435	5124
	50%	2365	3074	4118	5796	7298	8567
8"(200mm)	OVER PRESS 10%	1621	1903	2657	3618	4990	5900
	20%	2513	2960	4188	5783	8044	9569
	50%	3805	4525	6643	9519	13541	16351
10"(250mm)	OVER PRESS 10%	2575	3299	4201	5705	7208	8711
	20%	4002	5151	6662	9181	11699	14218
	50%	6113	7963	10747	15386	20025	24664
12"(300mm)	OVER PRESS 10%	3503	3739	4920	6888	8857	10826
	20%	5456	5852	7831	11129	14427	17725
	50%	8381	9110	12756	18830	24905	30980

The B300 Series ensures that tanks and vessels are kept safe during periods of excessive pressure caused by filling of product and changes in temperature due to climatic or external fire sources.

CLOSED VENT



- Open or Closed vent available
- Closed vent can operate as a vacuum relief valve
- Standard Pressure settings + 80 mbarg to 1 barg
- Size range 2" (50 mm) – 12" (300 mm)
- Standard body materials – Carbon steel, Stainless steel
- Standard trim material – Stainless steel
- Diaphragm material - FEP
- Removable seats
- Standard full form flanges – ANSI / DIN
- Lightweight design
- **Non standard applications – Consult factory**



FEATURES

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Connections

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Non Standard Applications

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MATERIALS

Body

Carbon Steel
Stainless Steel

Diaphragm

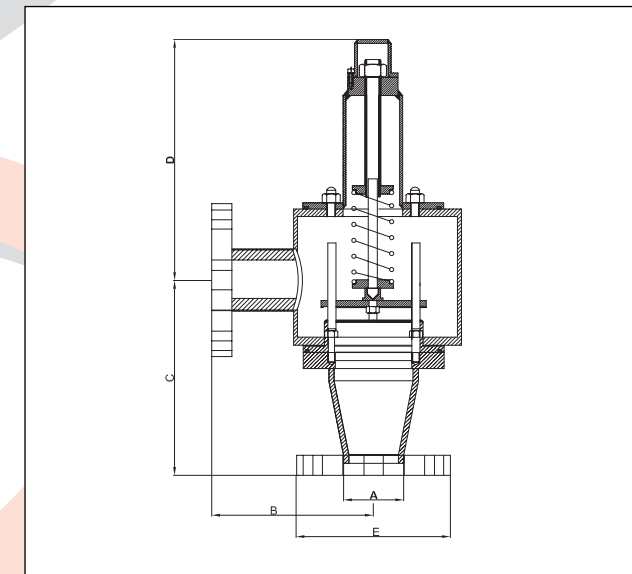
F.E.P
Others consult factory

Internals

Stainless Steel

Flanges

ANSI 125 ANSI 150 RF
DIN Standard flanges



DIMENSIONS

NOM SIZE	A	B	C	D	E
50 (2")	54	140	177	278	152
80 (3")	84	160	222	303	190
100 (4")	108	185	251	352	229
150 (6")	161	251	293	355	279
200 (8")	211	289	337	393	343
250 (10")	255	332	387	490	406
300 (12")	305	382	445	540	483

