



Storagetech
STORAGE TANK EQUIPMENT

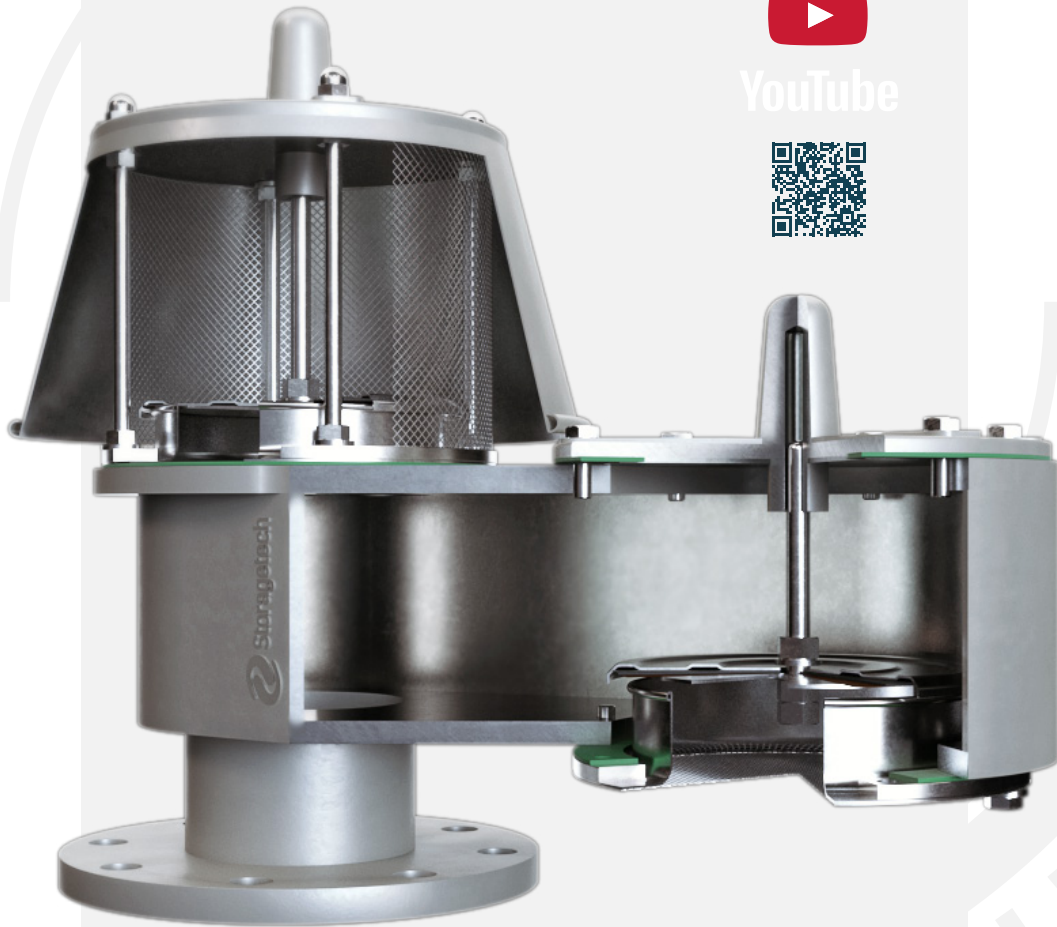
An Äger Brand

Pressure Vacuum Valve

C A T A L O G 2 0 2 1



PRESSURE VACUUM RELIEF VALVE



YouTube



Certificates & Standards



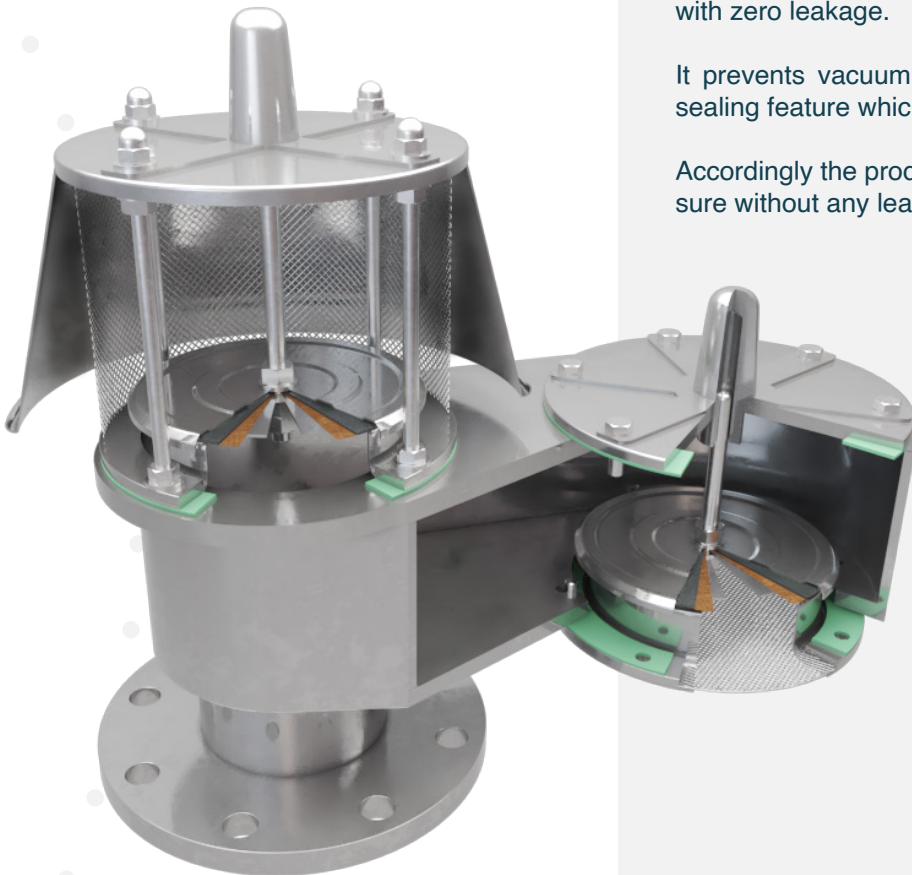


SuperDuo Technology

Super Duo technology provides extra curves and perfect seating with zero leakage.

It prevents vacuum and pressure fluctuations with its patented sealing feature which is activated at certain set pressure.

Accordingly the product is activated/ re-seated at certain set pressure without any leakage.

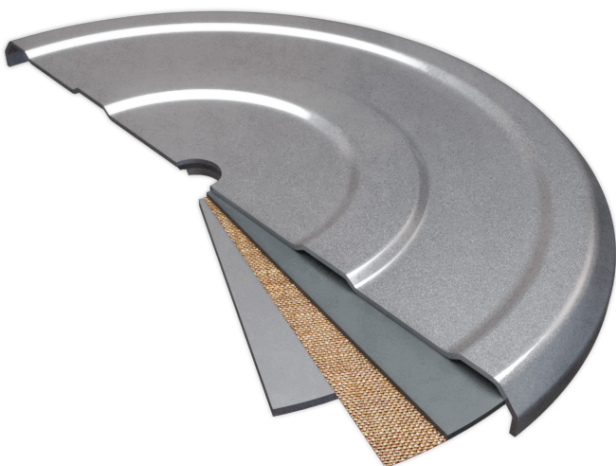


Multi-Layer Disc Surfaces

Special disc surfaces developed by Storagetech R&D gives guarantee as a precaution to the leakage possibility.

Thanks to curved thrust face design, sealing effect is boosted.

That is result of the work of our highly skilled engineering and design team.



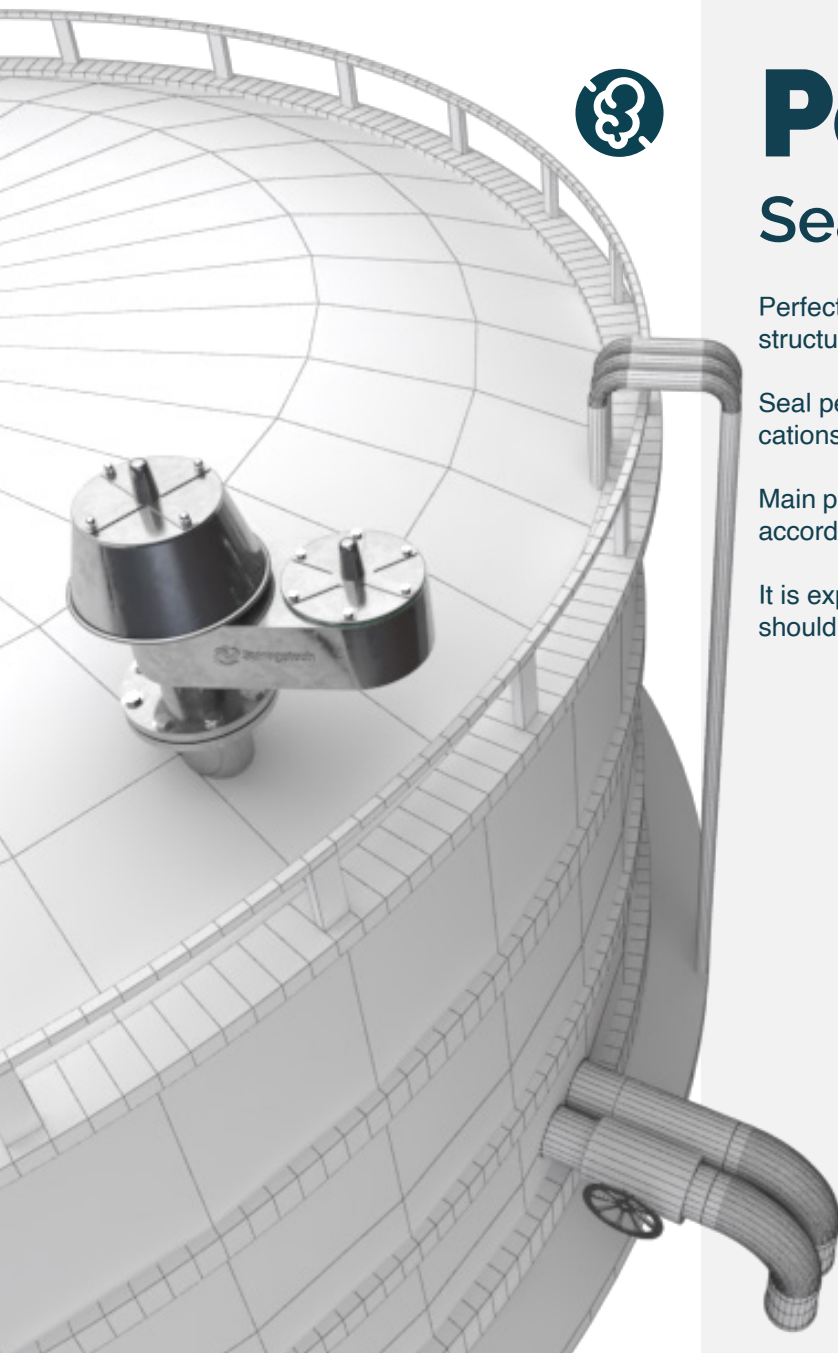


High Connection and Flange Standards



As in other equipment we manufacture, we care about the international standards for the even the smallest details of PVRV.

This is valid Such as ANSI, DIN, JIS, API, etc. any special end connections are available. Flange Standards follows DIN2527, EN1092, JIS B2220.



Perfect Sealing

Perfect Sealing up to 1 bar pressure. Sensitive and adjustable structure allows it to work exactly at the desired pressure.

Seal performance is up to two times effective than standard applications.

Main purpose of the PVRV is controlling leakage and taking action according to pressure level.

It is expected to open up at the desired level but under this level it should stay closed tightly.



Antibonding Pressure Gasket

Extreme conditions require special design and the proper material choose to obtain the better results and maximum performance. Critical parts may affect the whole system and at this stage all conditions such as heat, pressure and working conditions should be considered. This is why heat insensitive teflon gasket with stainless flaps 304/316 fits perfectly.



Corrosion Resistant

Seal performance would not be affected after years because of corrosion resistant alloys which provide high protection on seal system in any chemical environment. That has highly importance cause of the environment which product works might contain corrodent material.



Zero Leakage

Storagetech PVRV offers a seal which works with the maximum efficiency and it creates a working mechanism that prevents emission losses gas discharge.

Possible leakage might result critical result, such as loss of material or critical accident due to hazardous nature of the material which is stored. That is why we designed our product with the zero leakage guarantee at the desired levels.



Robust and Reliable Design

Technical and engineering design of Storagetech PVRV complies with the load requirements specified by international standards. Designed to be easy to carry and its inner material to be extra safe against impacts. That design promises long time usability and it decreases cost to replace the product.

Flame ARRESTER

End of Line Deflagration



YouTube



Certificates & Standards



Pressure Vacuum Relief Valve

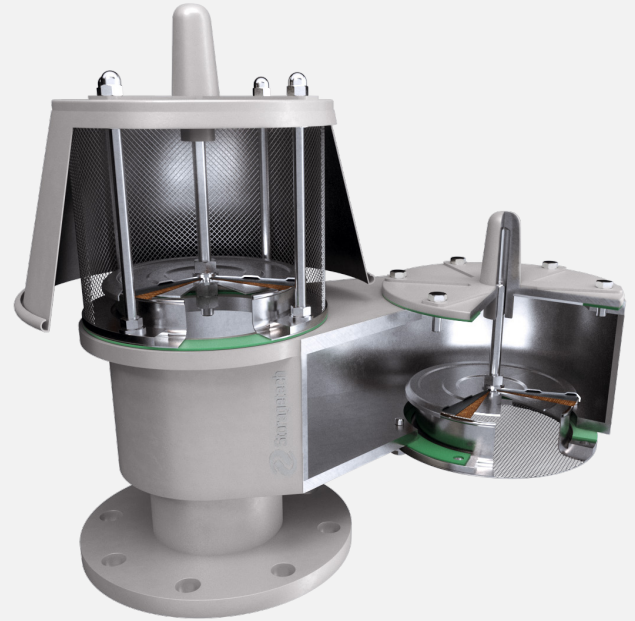
Top mounted, end of line, weight loaded
Model 100



Product Description

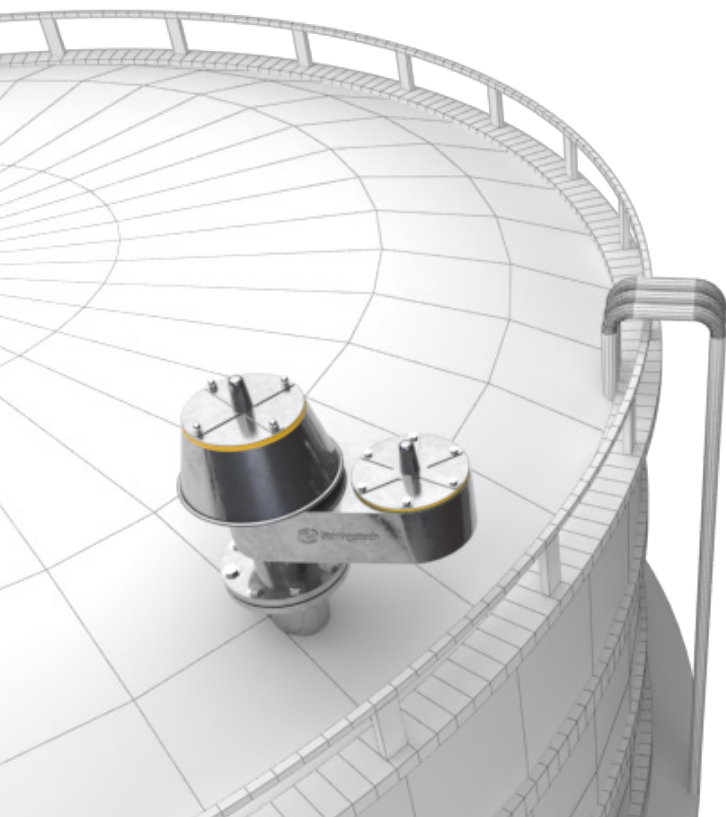
Storagetech™ 's Model 100 Top Mounted, End of Line, Weight Loaded Pressure Vacuum Relief Valve is designed to protect the tank from excessive internal pressure during operation. The weighted-loaded pallet and diaphragm assembly is held tightly against a seal to prevent the loss of vapour to atmosphere in the closed position. As the internal pressure in the tank increases, due to product filling or vapour development, the set pressure is reached, accordingly, the diaphragm shall be opened and discharge the gas to atmosphere. Model 100 set pressure can be arranged as per storage tank requirements and the valve will reseal when internal pressure returns to below set pressure. The vacuum pallet and diaphragm assembly is similarly maintained in the closed position.

As the internal pressure in the tank reduces, due to emptying vacuum conditions occurs, the balance between the tank pressure and the external atmospheric pressure changes. Accordingly when the set pressure of the unit is reached, the diaphragm opens to vacuum air content and rebalance the internal pressure. Storagetech Valves Activated as close as to set pressures, less than 10% of set pressures, ensuring accurate pressure management and isolate emission losses perfectly.



With 40 years of experience, Storagetech™ PVV systems offer effective solutions against unwanted evaporation and vacuums that may occur in tanks.

Thanks to PVV solutions produced completely in accordance with international norms, Storagetech™ is a reliable, sustainable and effective solution partner for your investments.



Construction

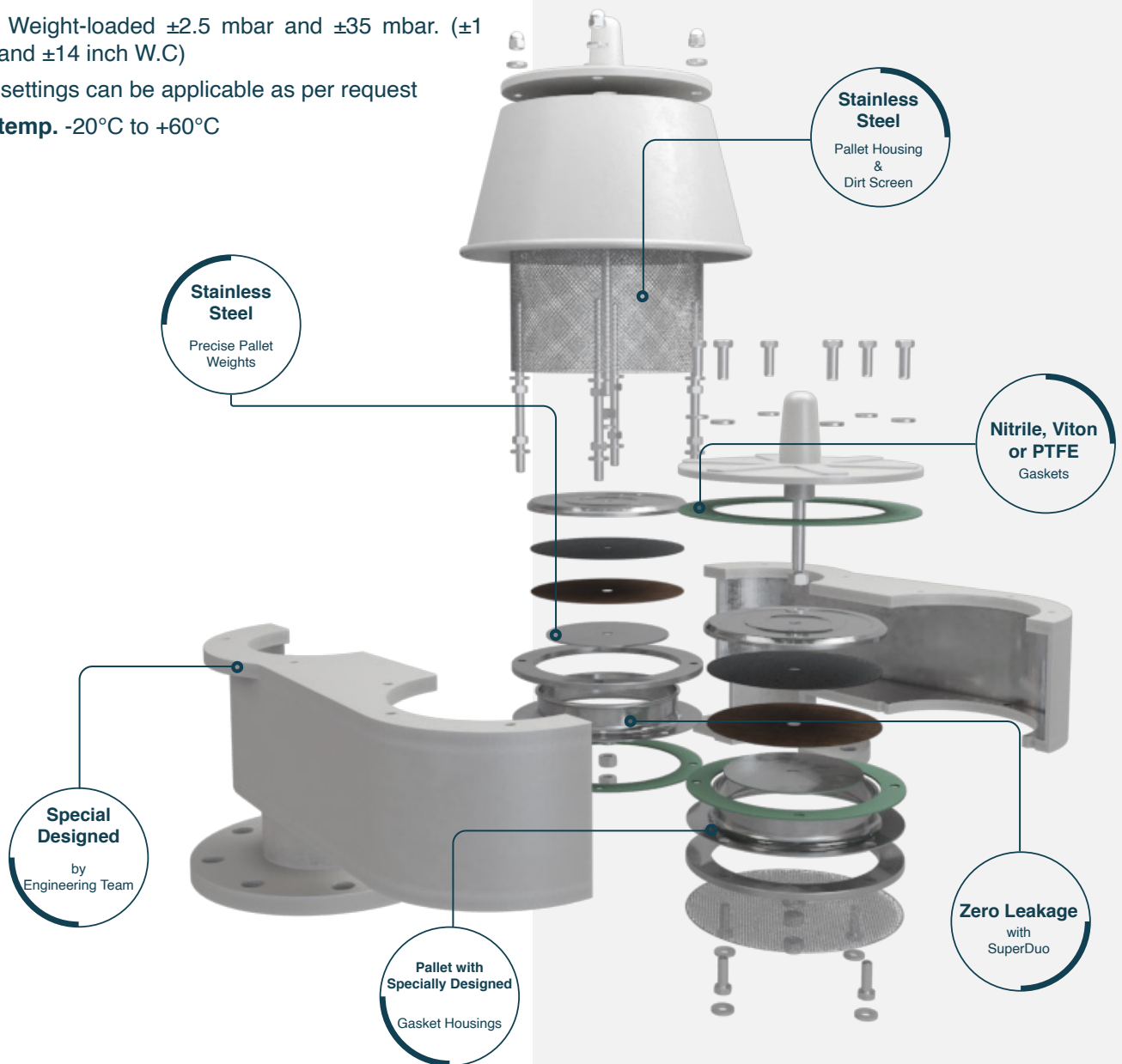
Standard Sizes	2" to 12" (DN50 to DN300) Further sizes are applicable upon request.
Flanges	ANSI, DIN, JIS, BSP
Body	Carbon Steel, Stainless Steel or Aluminium
Seals	Klingrit, Nitrile, Viton, PTFE
Pallet	Stainless Steel AISI 304/316
Springs	Stainless Steel
Paint Finish	1. Customer Specification 2. Powder Coating, Colour RAL 9006 3. Epoxy Paint, Colour RAL 9006 4. PTFE Coating
ATEX Cert	Ex 111/2 G c II B

Setting Range

Pressure Weight-loaded ± 2.5 mbar and ± 35 mbar. (± 1 inch W.C and ± 14 inch W.C)

*Different settings can be applicable as per request

Ambient temp. -20°C to $+60^{\circ}\text{C}$

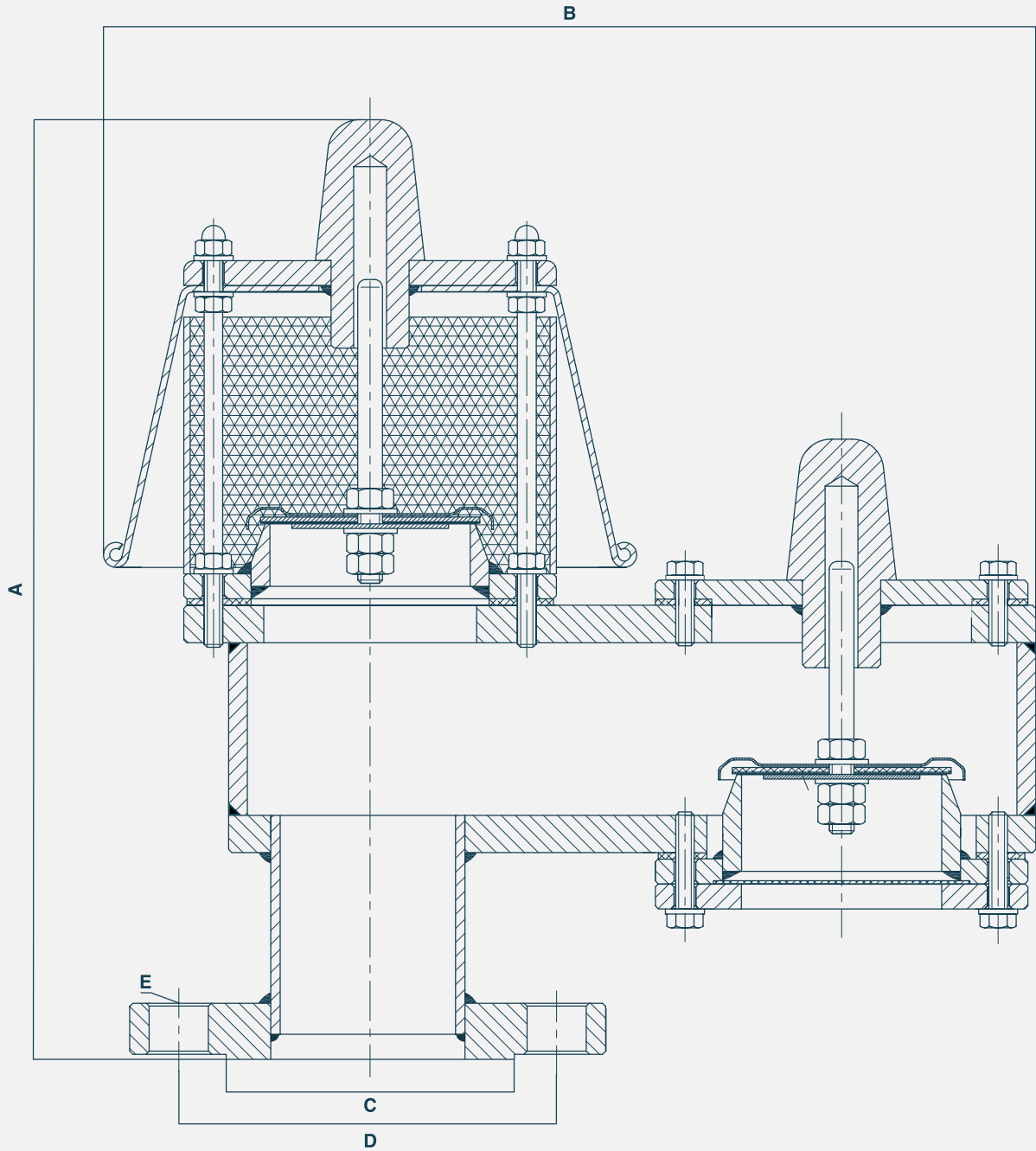


Key Features

- Easy to install. Do not need a special tool or experience.
- Light weight construction.
- Quick and easy to install, inspect and clean.
- Any grade materials are available.
- Has stainless steel pallets.
- Large weatherhood provides maximum airflow.
- Internal materials are resistant to winter conditions.
- Special designs can be achievable upon request to meet individual specifications.
- Vacuum and relief cases can be managed effectively as per the set requirements of bulk storage tank.

- Super Duo technology provides extra curves and perfect seating with zero leakage.
- Set values can be arranged as per the site conditions, no need supervising.
- Diaphragm is manufactured from PTFE material to prevent possibility of ice formation and sticky residues hindering the valve from opening, while the pallet assembly moves freely on guide posts.
- Design, manufacturing and test according to EN ISO 80079-36.
- Breathing requirements are fulfilled according to API 2000 7th Edition.
- PTFE, XYLAN, Rubber lining, etc. coating options are available.

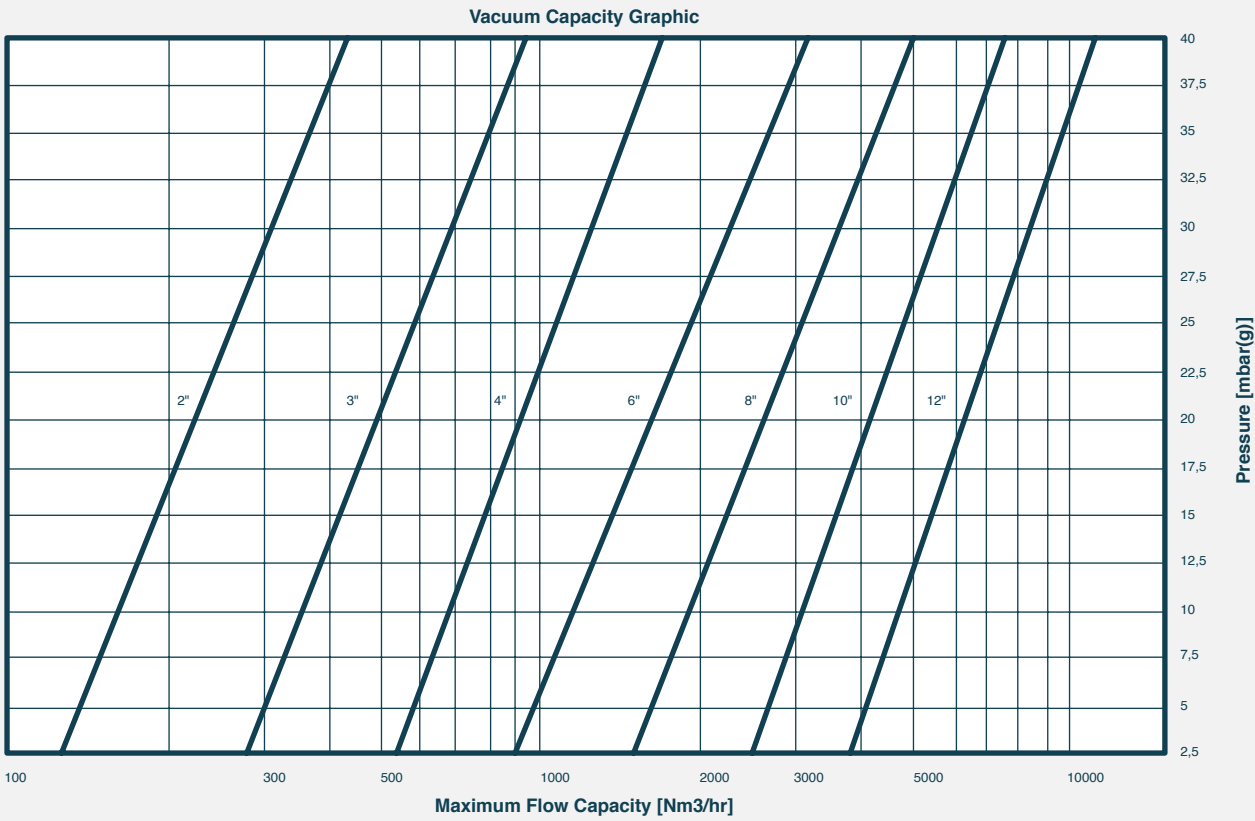
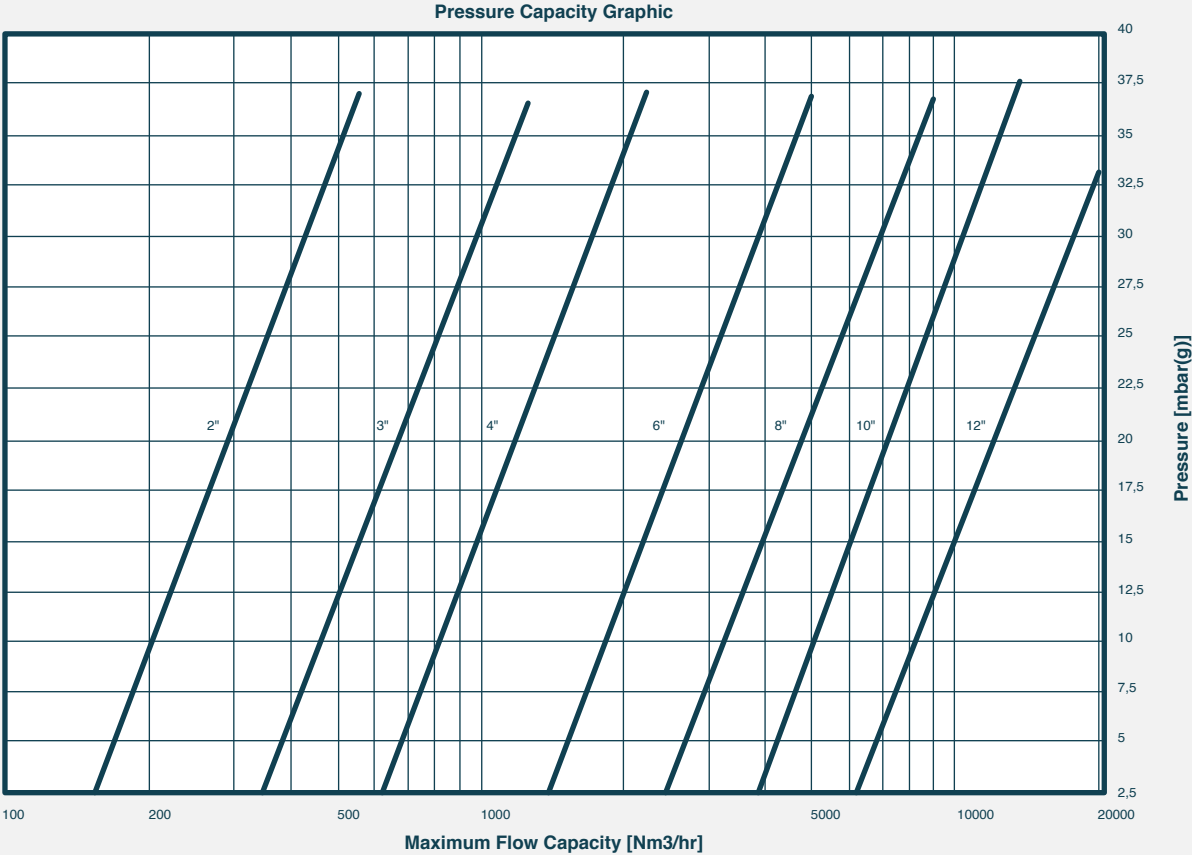
Technical Drawing



Weight & Dimensions

SIZE	NPS	DN	A	B	C		D		E		TOTAL WEIGHT (kg)				
					ANSI 150# RF	DN	ANSI 150# RF	DN	ANSI 150# RF	DN	WELDED		CASTING		
											CS	SS	AL	CS	SS
2"	50	317	270	Ø92.1	Ø102	Ø120.6	Ø125	Ø19x4	Ø18x4	10-15	10-15	4-6	14-19	15-19	
3"	80	334	350	Ø127	Ø138	Ø152.4	Ø160	Ø19x4	Ø18x8	15-20	15-20	9-12	22-28	23-29	
4"	100	418	475	Ø157.2	Ø158	Ø190.5	Ø180	Ø19x8	Ø18x8	23-28	23-28	13-18	35-43	35-43	
6"	150	449	615	Ø215.9	Ø212	Ø241.3	Ø240	Ø22.2x8	Ø22x8	42-50	42-50	20-27	49-60	49-60	
8"	200	494	807	Ø269.9	Ø268	Ø298.4	Ø295	Ø22.2x8	Ø22x12	70-80	70-85	36-45	90-110	90-110	
10"	250	592	908	Ø323.8	Ø320	Ø362	Ø355	Ø25.4x12	Ø26x12	90-110	90-115	60-85	120-145	120-145	
12"	300	630	1020	Ø381	Ø378	Ø431.8	Ø410	Ø25.4x12	Ø26x12	150-175	150-185	95-120	190-230	190-230	

Flow Capacity Tables

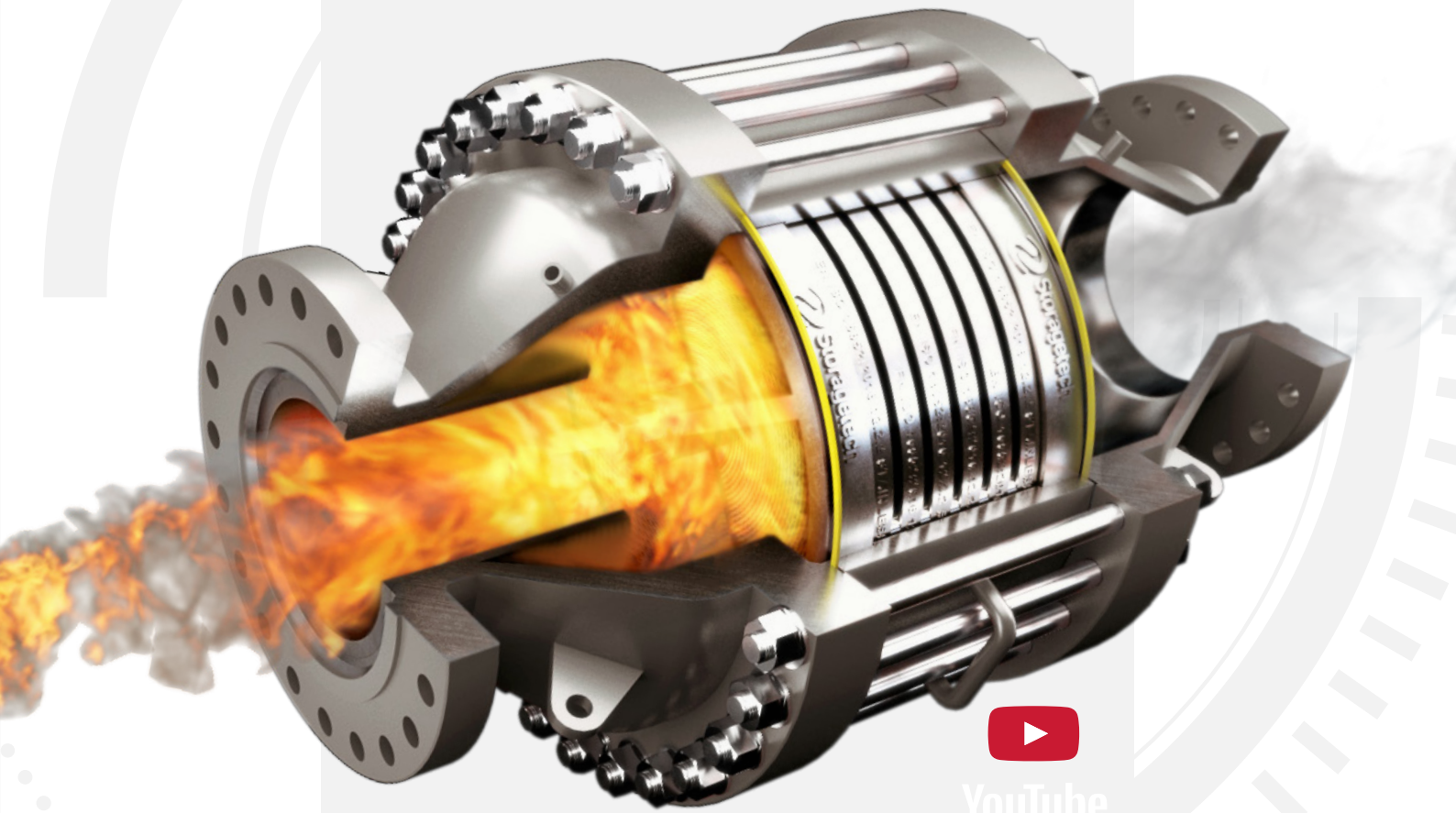


Flow Capacity Tables

PRESSURE RELIEF CAPACITIES [Nm ³ /hr] - OVERPRESSURE WEIGHTED														
mbar (g)	2"		3"		4"		6"		8"		10"		12"	
	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%
2,5	150	163	339	367	603	653	1356	1468	2413	2613	3777	4089	5439	5888
5	213	230	480	519	853	924	1917	2076	3414	3696	5342	5783	7691	8326
7,5	275	297	620	671	1104	1195	2479	2683	4415	4779	6907	7478	9943	10764
10	302	327	679	735	1207	1306	2711	2935	4827	5225	7554	8177	10876	11774
12,5	329	356	738	799	1309	1417	2943	3186	5239	5671	8200	8877	11809	12784
15	356	386	797	863	1412	1528	3175	3437	5651	6117	8846	9577	13309	14408
17,5	384	415	856	926	1514	1639	3407	3689	6063	6563	9493	10277	14502	15700
20	426	461	960	1040	1706	1847	3812	4126	6823	7387	10678	11559	15374	16644
22,5	469	507	1065	1153	1898	2054	4216	4564	7584	8210	11862	12842	15940	17256
25	476	516	1070	1159	1906	2064	4285	4639	7628	8258	11936	12921	17178	18597
27,5	484	524	1076	1165	1915	2073	4353	4713	7671	8305	12009	13000	18417	19937
30	522	565	1176	1273	2088	2261	4692	5080	8355	9045	12201	13209	18824	20379

VACUUM RELIEF CAPACITIES [Nm ³ /hr] - UNDERPRESSURE WEIGHTED														
mbar	2"		3"		4"		6"		8"		10"		12"	
	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%
2,5	119	127	268	285	567	604	963	1026	1549	1651	2739	2918	3906	4161
5	182	194	347	369	653	695	1363	1452	2145	2286	3324	3542	4780	5092
7,5	245	261	426	454	706	752	1772	1888	2628	2800	3561	3794	5313	5660
10	254	270	505	538	777	828	2127	2266	3042	3241	3888	4143	5284	6024
12,5	262	279	550	586	936	998	2339	2492	3301	3517	4216	4492	5995	6387
15	286	304	593	632	1017	1083	2526	2692	3638	3876	4452	4744	6101	6955
17,5	309	329	658	701	1140	1214	2678	2853	4004	4266	4888	5208	7061	7523
20	361	384	708	755	1279	1363	2785	2967	4296	4577	5580	5945	7735	8818
22,5	412	439	768	819	1317	1403	2869	3056	4588	4888	6272	6683	9492	10113
25	398	424	817	871	1344	1431	2926	3117	4811	5125	6708	7147	9369	10681
27,5	384	409	861	918	1396	1488	2984	3180	5042	5372	7143	7611	10558	11248
30	439	467	910	969	1772	1888	3044	3243	5312	5659	7703	8207	11338	12080

Flame ARRESTER



YouTube



Certificates & Standards



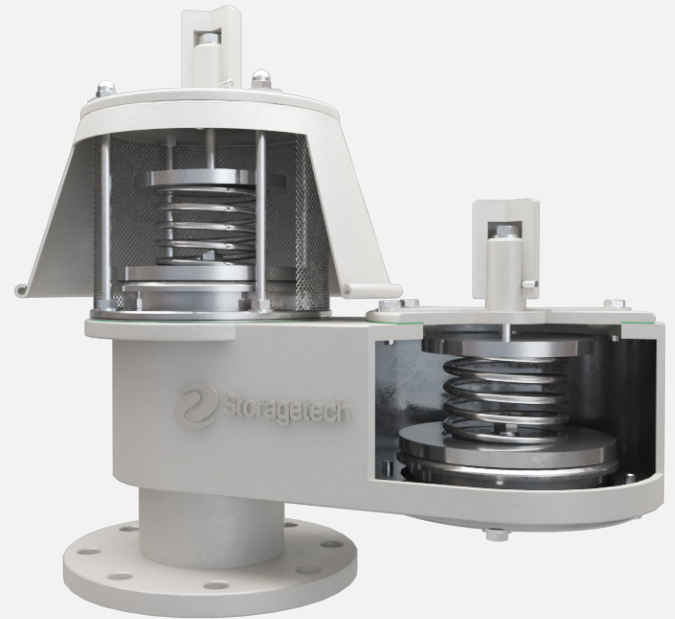
Pressure Vacuum Relief Valve

Top mounted, end of line, spring loaded
Model 101



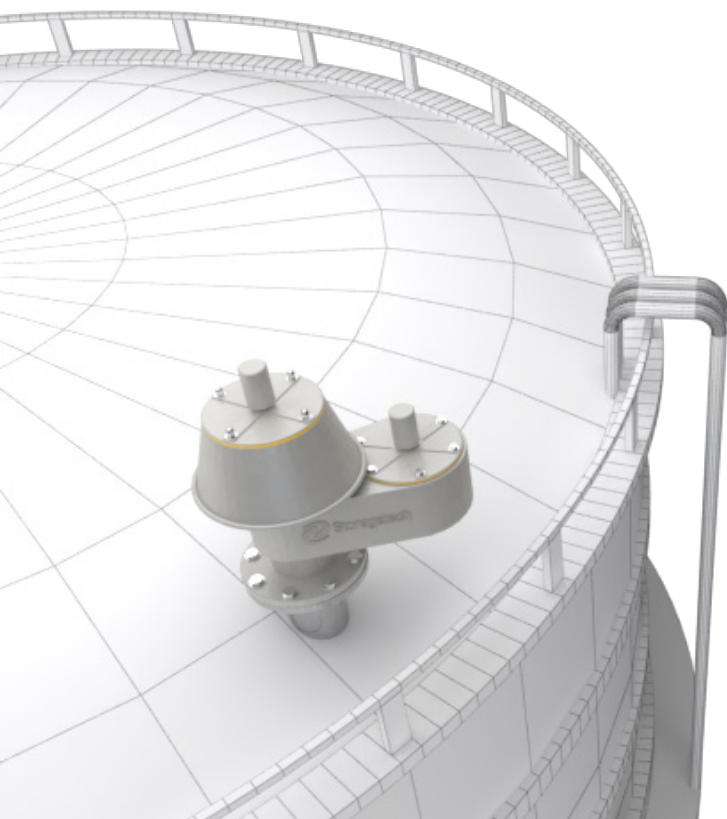
Product Description

Storagetech™ 's Model 101 Top Mounted, End of Line, Spring Loaded Pressure Vacuum Relief Valve is designed to protect the tank from excessive internal pressure during operation. The spring-loaded pallet and diaphragm assembly is held tightly against a seal to prevent the loss of vapour to atmosphere in the closed position. As the internal pressure in the tank increases, due to product filling or vapour development, the set pressure is reached, accordingly, the diaphragm shall be opened and discharge the gas to atmosphere. Model 101 set pressure can be arranged as per storage tank requirements and the valve will reseal when internal pressure returns to below set pressure. The vacuum pallet and diaphragm assembly is similarly maintained in the closed position. As the internal pressure in the tank reduces, due to emptying vacuum conditions occurs, the balance between the tank pressure and the external atmospheric pressure changes. Accordingly when the set pressure of the unit is reached, the diaphragm opens to vacuum air content and rebalance the internal pressure. Storagetech Valves Activated as close as to set pressures, less than 10% of set pressures, ensuring accurate pressure management and isolate emission losses perfectly.



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Thanks to PVV solutions produced completely in accordance with international norms, Storagetech™ is a reliable, sustainable and effective solution partner for your investments.



Construction

Standard Sizes	2" to 12" (DN50 to DN300) Further sizes are applicable upon request.
Flanges	ANSI, DIN, JIS, BSP
Body	Carbon Steel, Stainless Steel or Aluminium
Seals	Klingrit, Nitrile, Viton, PTFE
Pallet	Stainless Steel AISI 304/316
Springs	Stainless Steel
Paint Finish	1. Customer Specification 2. Powder Coating, Colour RAL 9006 3. Epoxy Paint, Colour RAL 9006 4. PTFE Coating
ATEX Cert	Ex II 1/2 G c II B

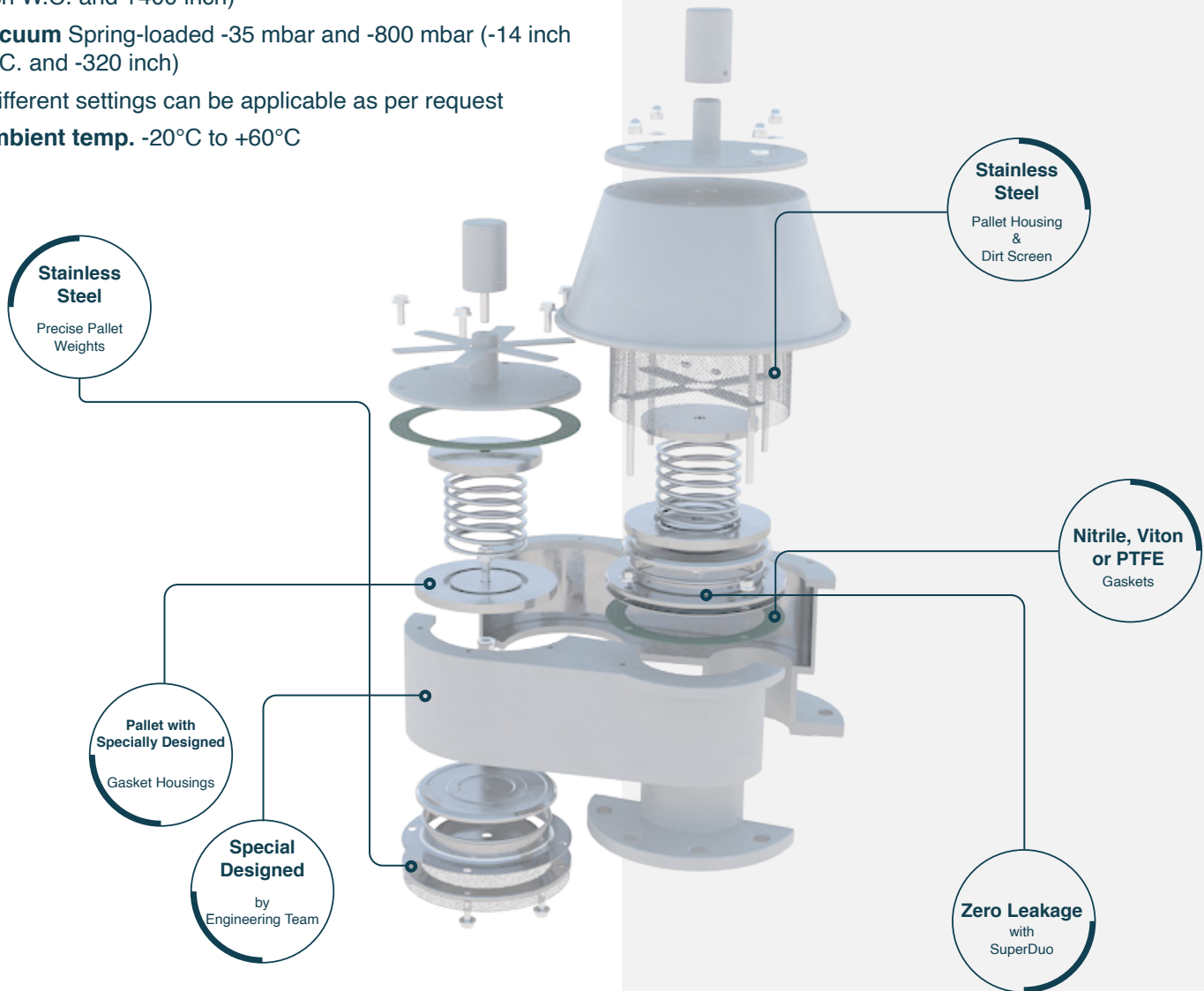
Setting Range

Pressure Spring-loaded +35 mbar and +1000 mbar (+14 inch W.C. and +400 inch)

Vacuum Spring-loaded -35 mbar and -800 mbar (-14 inch W.C. and -320 inch)

*Different settings can be applicable as per request

Ambient temp. -20°C to +60°C

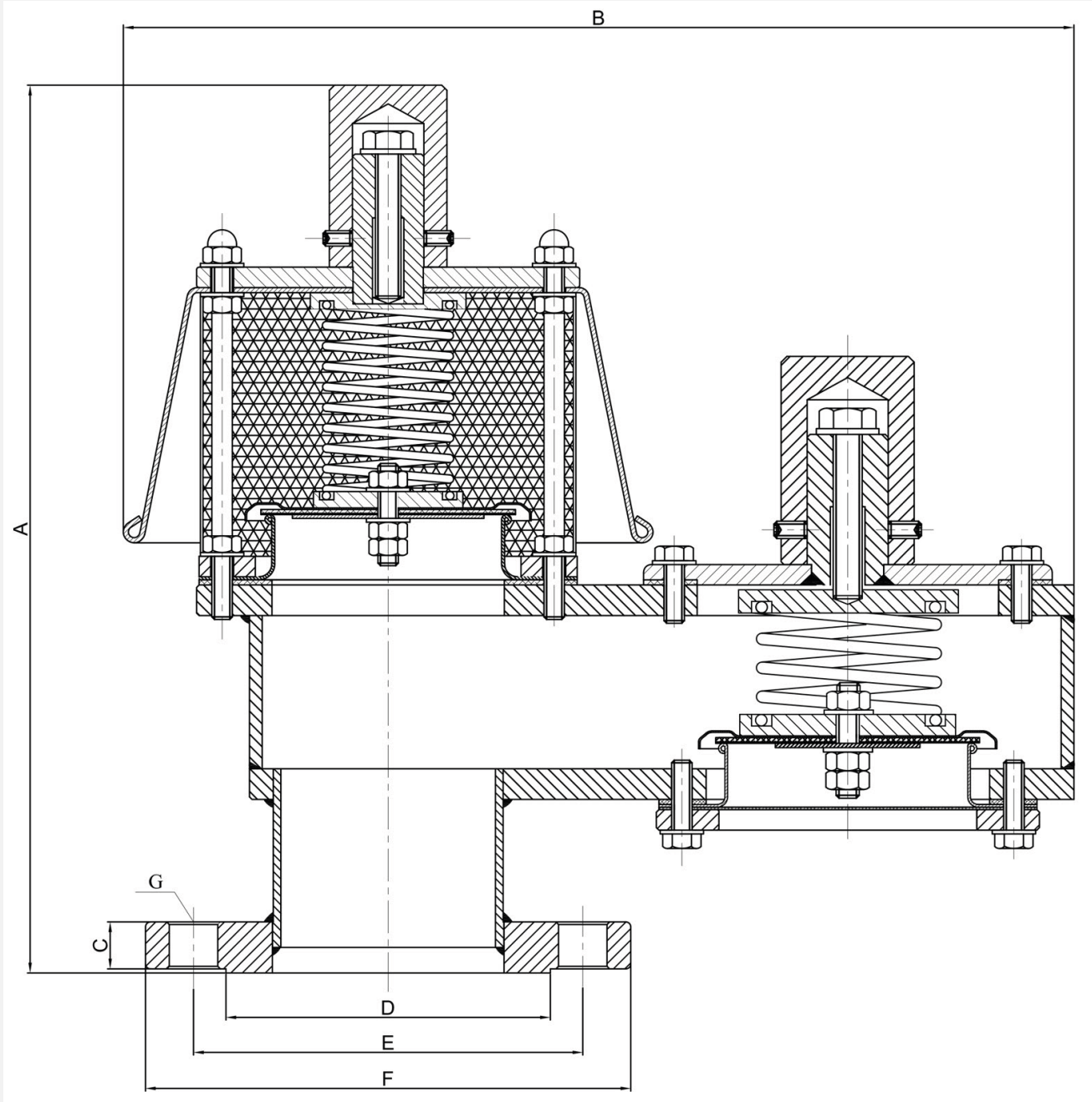


Key Features

- Easy to install. Do not need a special tool or experience.
- Light weight construction.
- Quick and easy to install, inspect and clean.
- Any grade materials are available.
- Has stainless steel pallets.
- Large weatherhood provides maximum airflow.
- Internal materials are resistant to winter conditions.
- Special designs can be achievable upon request to meet individual specifications.
- Vacuum and relief cases can be managed effectively as per the set requirements of bulk storage tank.

- Super Duo technology provides extra curves and perfect seating with zero leakage.
- Set values can be arranged as per the site conditions, no need supervising.
- Diaphragm is manufactured from PTFE material to prevent possibility of ice formation and sticky residues hindering the valve from opening, while the pallet assembly moves freely on guide posts.
- Design, manufacturing and test according to EN ISO 80079-36.
- Breathing requirements are fulfilled according to API 2000 7th Edition.
- PTFE, XYLAN, Rubber lining, etc. coating options are available.

Technical Drawing

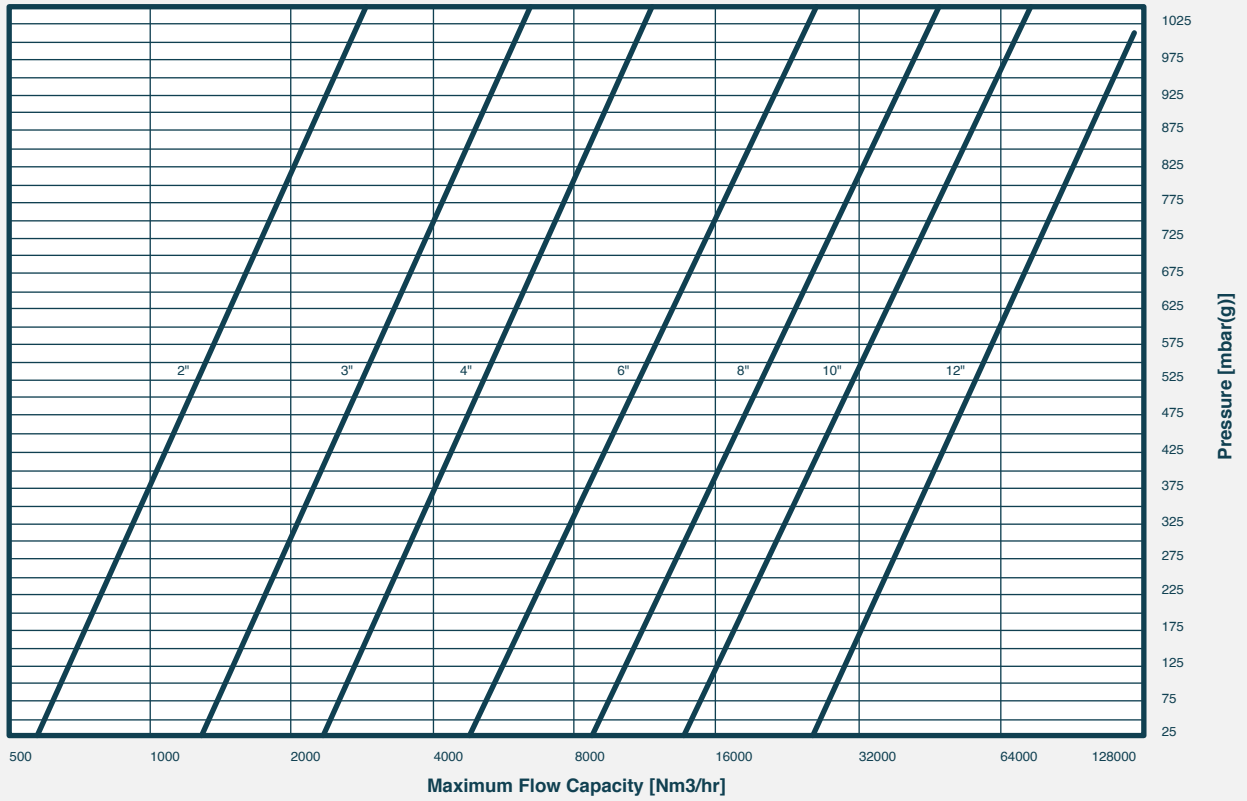


Weight & Dimensions

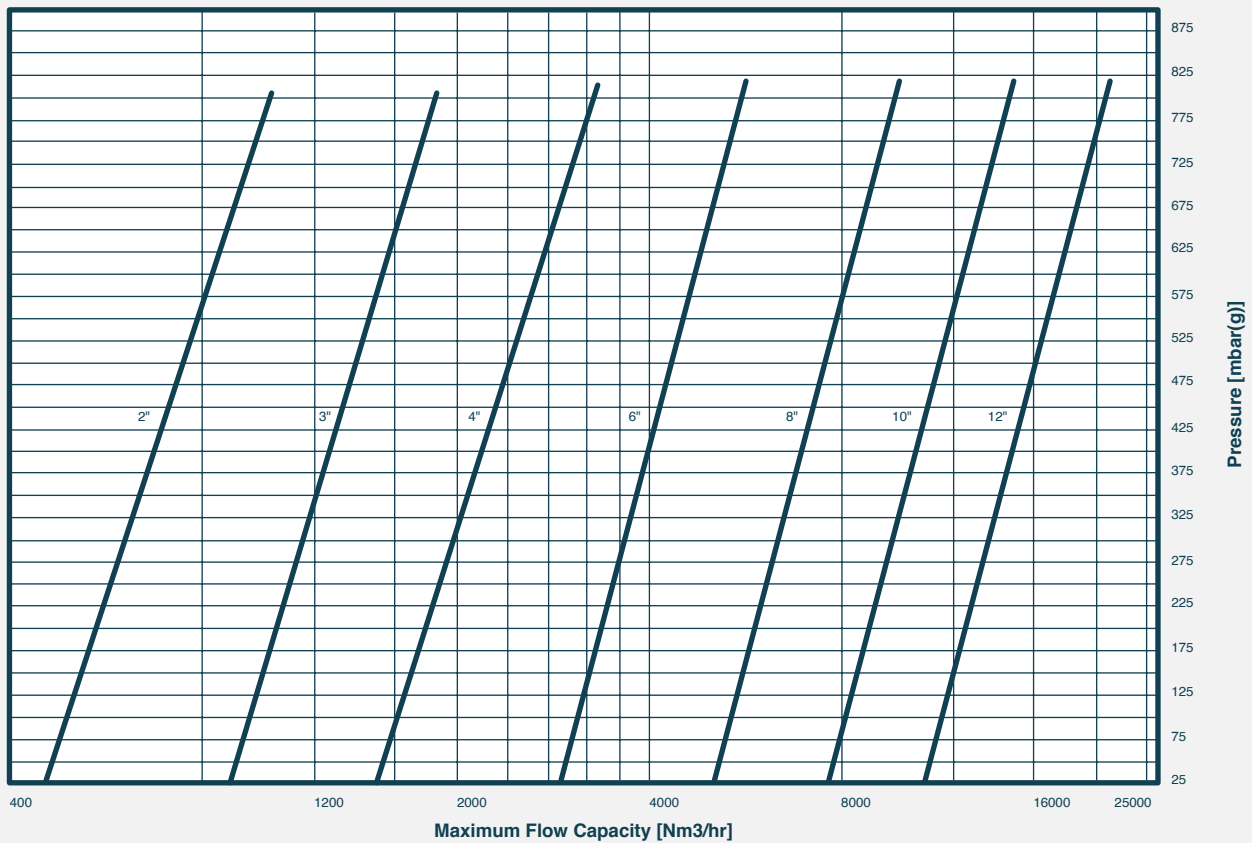
SIZE		A	B	C	D		E		F		G		TOTAL WEIGHT (kg)
NPS	DN				ANSI 150# RF	DN	ANSI 150# RF	DN	ANSI 150# RF	DN	ANSI 150# RF	DN	
2"	50	330	270	18	Ø92.1	Ø102	Ø120.6	Ø125	Ø152	Ø165	Ø19x4	Ø18x4	13,5
3"	80	347	350	18	Ø127	Ø138	Ø152.4	Ø160	Ø190	Ø200	Ø19x4	Ø18x8	19,5
4"	100	433	475	18	Ø157.2	Ø158	Ø190.5	Ø180	Ø229	Ø220	Ø19x8	Ø18x8	27,1
6"	150	464	615	18	Ø215.9	Ø212	Ø241.3	Ø240	Ø279	Ø285	Ø22.2x8	Ø22x8	45,4
8"	200	509	807	18	Ø269.9	Ø268	Ø298.4	Ø295	Ø343	Ø340	Ø22.2x8	Ø22x12	75,3
10"	250	607	908	18	Ø323.8	Ø320	Ø362	Ø355	Ø406	Ø405	Ø25.4x12	Ø26x12	97,9
12"	300	645	1020	18	Ø381	Ø378	Ø431.8	Ø410	Ø483	Ø460	Ø25.4x12	Ø26x12	126,1

Flow Capacity Tables

Pressure Capacity Graphic



Vacuum Capacity Graphic



Flow Capacity Tables

PRESSURE RELIEF CAPACITIES [Nm³/hr] - OVERPRESSURE SPRING

mbar (g)	2"		3"		4"		6"		8"		10"		12"	
	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%
40	569	585	1282	1320	2277	2344	5090	5239	9111	9377	14260	14676	20533	21131
50	637	655	1434	1476	2546	2620	5721	5887	10185	10481	15936	16400	22948	23617
60	697	718	1569	1614	2788	2869	6264	6447	11153	11478	17453	17962	25130	25862
70	752	774	1694	1744	3011	3098	6764	6961	12043	12394	18845	19394	27133	27924
80	804	828	1811	1863	3217	3310	7229	7439	12869	13244	20139	20725	28997	29841
90	854	879	1921	1977	3411	3511	7665	7889	13645	14043	21352	21974	30744	31640
100	899	925	2024	2083	3595	3699	8075	8310	14379	14798	22500	23156	32397	33340
120	985	1013	2216	2280	3935	4049	8842	9099	15739	16198	24627	25345	35463	36496
140	1062	1093	2391	2460	4246	4369	9543	9821	16989	17484	26584	27359	38278	39393
160	1135	1168	2554	2629	4537	4669	10195	10492	18149	18677	28397	29224	40891	42082
180	1203	1238	2708	2787	4809	4949	10805	11119	19236	19797	30097	30973	43342	44605
200	1267	1304	2852	2935	5065	5212	11382	11713	20262	20852	31709	32632	45650	46979
240	1386	1427	3120	3211	5541	5703	12451	12813	22166	22811	34680	35690	49940	51394
280	1496	1539	3365	3463	5977	6151	13430	13821	23908	24605	37410	38499	53868	55437
300	1547	1592	3481	3583	6182	6362	13892	14296	24730	25451	38697	39824	55702	57325
350	1668	1716	3750	3859	6665	6859	14978	15415	26665	27441	41727	42943	60080	61830
400	1780	1832	4006	4122	7114	7321	15986	16451	28457	29286	44527	45824	64118	65985
450	1885	1940	4242	4365	7532	7752	16926	17419	30225	31106	47151	48525	67891	69869
500	1983	2041	4463	4593	7927	8158	17812	18331	31709	32632	49617	51062	71441	73522
550	2076	2137	4673	4809	8300	8541	18648	19191	33201	34168	51953	53466	74805	76984
600	2165	2228	4873	5015	8654	8906	19446	20013	34618	35627	54168	55745	77998	80270
650	2251	2316	5063	5211	8993	9255	20207	20795	35973	37021	56290	57929	81050	83410
700	2331	2399	5246	5399	9316	9588	20935	21545	37265	38351	58319	60017	83976	86422
750	2409	2479	5422	5580	9628	9909	21636	22266	38517	39639	60265	62021	86762	89289
800	2483	2556	5591	5754	9929	10218	22310	22960	39717	40874	62149	63959	89484	92091
850	2554	2629	5754	5921	10218	10515	22959	23627	40870	42061	63958	65821	92091	94774
900	2627	2703	5911	6083	10498	10804	23588	24275	41993	43216	65710	67624	94611	97366
950	2694	2773	6064	6240	10769	11082	24197	24902	43076	44330	67405	69369	97051	99877
1000	2762	2843	6216	6397	11036	11358	24800	25523	44149	45435	69099	71111	99467	102364

Flow Capacity Tables

VACUUM RELIEF CAPACITIES [Nm³/hr] - UNDERPRESSURE SPRING

mbar (g)	2"		3"		4"		6"		8"		10"		12"	
	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%
40	556	587	1031	1090	1813	1915	3138	3315	5475	5785	8260	8728	11686	12347
50	567	599	1052	1112	1849	1954	3200	3381	5584	5900	8425	8902	11920	12594
60	578	611	1073	1134	1886	1993	3264	3449	5696	6018	8594	9080	12158	12846
70	590	623	1095	1156	1924	2032	3330	3518	5810	6139	8766	9262	12401	13103
80	602	636	1116	1180	1962	2073	3396	3588	5926	6261	8941	9447	12649	13365
90	614	648	1139	1203	2001	2115	3464	3660	6045	6387	9120	9636	12902	13632
100	626	661	1162	1227	2041	2157	3533	3733	6165	6514	9302	9829	13160	13905
120	639	675	1185	1252	2082	2200	3604	3808	6289	6645	9488	10025	13423	14183
140	651	688	1208	1277	2124	2244	3676	3884	6415	6778	9678	10226	13692	14467
160	664	702	1233	1302	2166	2289	3750	3962	6543	6913	9872	10430	13966	14756
180	678	716	1257	1328	2210	2335	3825	4041	6674	7051	10069	10639	14245	15051
200	691	730	1282	1355	2254	2381	3901	4122	6807	7192	10270	10852	14530	15352
240	705	745	1308	1382	2299	2429	3979	4204	6943	7336	10476	11069	14820	15659
280	726	767	1347	1424	2368	2502	4099	4331	7152	7556	10790	11401	15265	16129
300	748	790	1388	1466	2439	2577	4222	4460	7366	7783	11114	11743	15723	16613
350	770	814	1429	1510	2512	2654	4348	4594	7587	8017	11447	12095	16195	17111
400	793	838	1472	1556	2587	2734	4479	4732	7815	8257	11791	12458	16681	17625
450	817	864	1516	1602	2665	2816	4613	4874	8049	8505	12144	12832	17181	18154
500	842	889	1562	1650	2745	2900	4751	5020	8291	8760	12509	13217	17696	18698
550	875	925	1624	1716	2855	3016	4941	5221	8622	9110	13009	13745	18404	19446
600	910	962	1689	1785	2969	3137	5139	5430	8967	9475	13529	14295	19140	20224
650	947	1000	1757	1856	3088	3262	5345	5647	9326	9854	14071	14867	19906	21033
700	985	1040	1827	1931	3211	3393	5558	5873	9699	10248	14633	15462	20702	21874
750	1024	1082	1900	2008	3340	3529	5781	6108	10087	10658	15219	16080	21530	22749
800	1065	1125	1976	2088	3473	3670	6012	6352	10490	11084	15828	16723	22392	23659

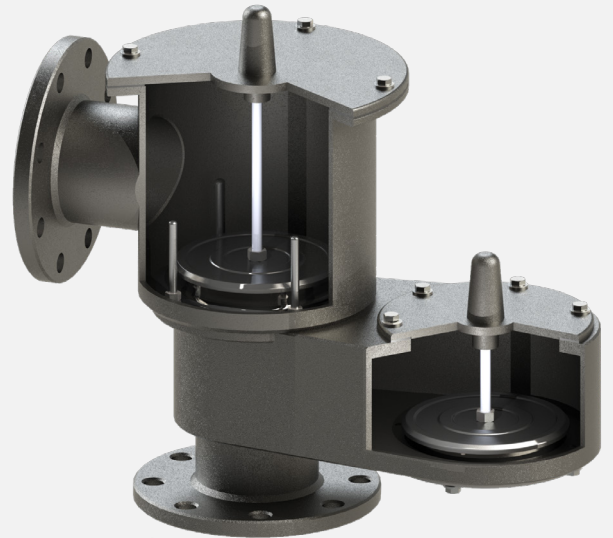
Pressure Vacuum Relief Valve

Top mounted, pipe-away, weight loaded
Model 120



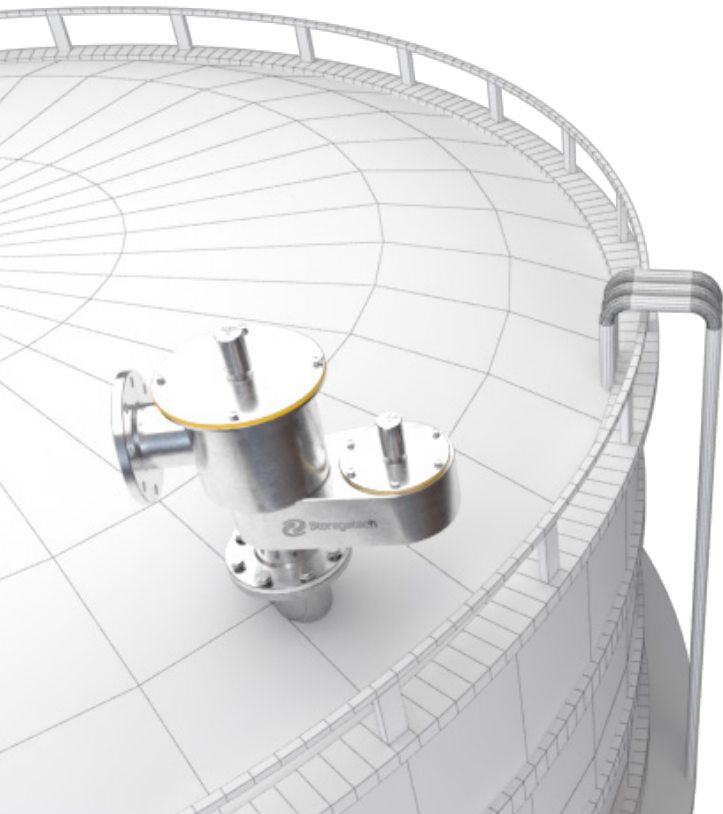
Product Description

Storagetech™ 's Model 120 Top Mounted, Pipe-Away, Weight Loaded Pressure Vacuum Relief Valve provides protection to bulk storage tanks and vessels from over and under pressurisation. The valves are mounted on the tank roof flange or a vent pipe from the vapour space. Sytem is especially preferred for transferring vapour content to collection system or condensation units, even prevent certain fire hazards. The pressure / vacuum relief pallet and diaphragm assembly is held tightly against a seal to prevent the loss of vapour to atmosphere in the closed position. Due to product filling and vapour development, the pressure in tank increases and in the event that the set pressure of the unit is reached. Accordingly the diaphragm will be opened and discharge the gas to system. System back pressure are also included in balance calculations to achieve desired certain seat and re-seat actions. The vacuum pallet and diaphragm assembly is similarly maintained in the closed position. As the internal pressure in the tank reduces, due to emptying vacuum conditions occurs, the balance between the tank pressure and the external atmospheric pressure changes. Accordingly when the set pressure of the unit is reached, the diaphragm opens to vacuum air content and rebalance the internal pressure. Storagetech Valves Activated as close as to set pressures, less than 10% of set)ressures, ensuring accurate pressure management and isolate emission losses perfectly.



With 40 years of experience, Storagetech™ PVV systems offer effective solutions against unwanted evaporation and vacuums that may occur in tanks.

Thanks to PVV solutions produced completely in accordance with international norms, Storagetech™ is a reliable, sustainable and effective solution partner for your investments.



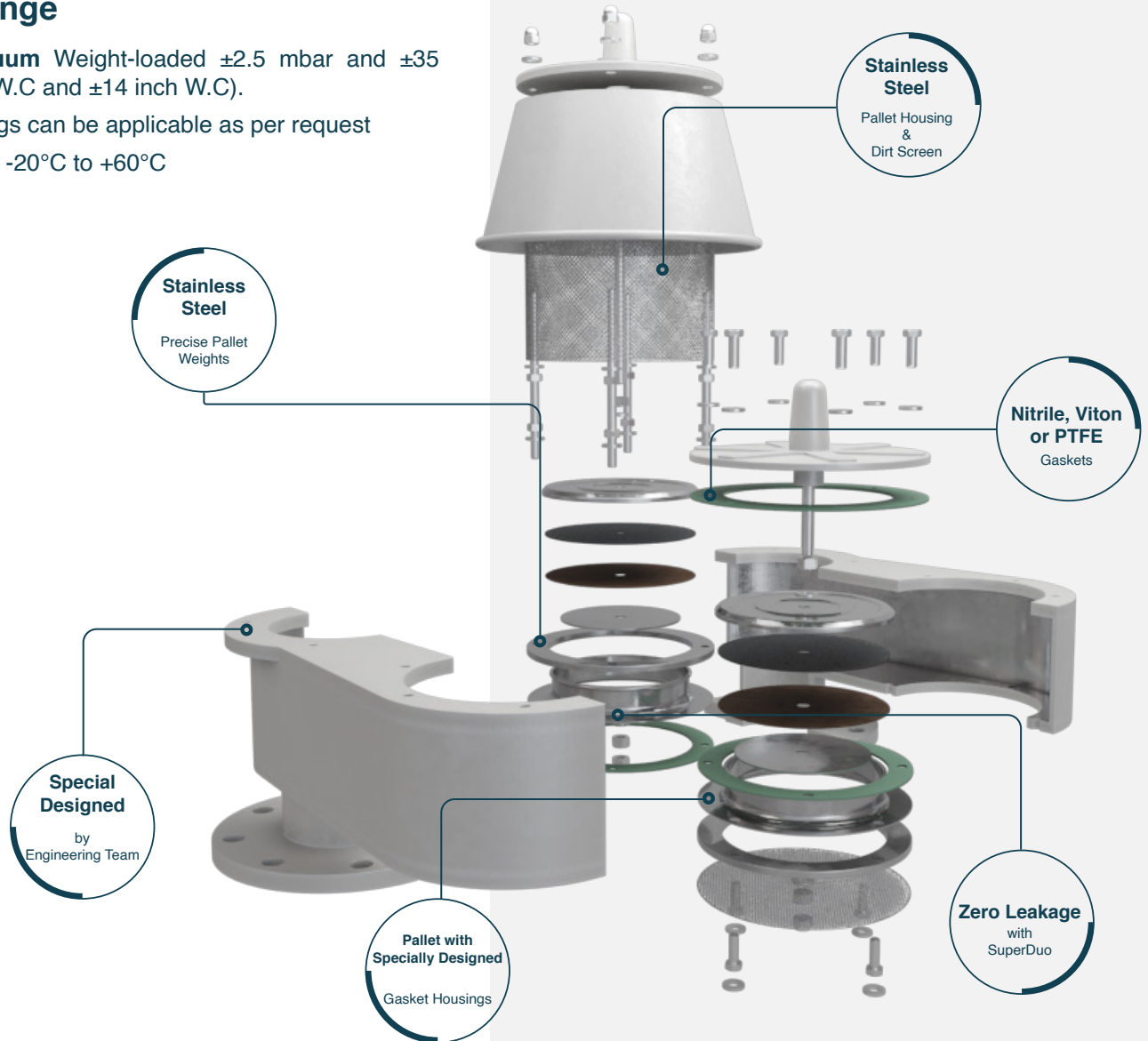
Standard Sizes	2" to 12" (DN50 to DN300) Further sizes are applicable upon request.
Flanges	ANSI, DIN, JIS, BSP
Body	Carbon Steel, Stainless Steel or Aluminium
Seals	Klingrit, Nitrile, Viton, PTFE
Pallet	Stainless Steel AISI 304/316
Springs	Stainless Steel
Paint Finish	1. Customer Specification 2. Powder Coating, Colour RAL 9006 3. Epoxy Paint, Colour RAL 9006 4. PTFE Coating
ATEX Cert	Ex II 1/2 G c II B

Setting Range

Pressure Vacuum Weight-loaded ± 2.5 mbar and ± 35 mbar. (± 1 inch W.C and ± 14 inch W.C).

*Different settings can be applicable as per request

Ambient temp. -20°C to $+60^{\circ}\text{C}$

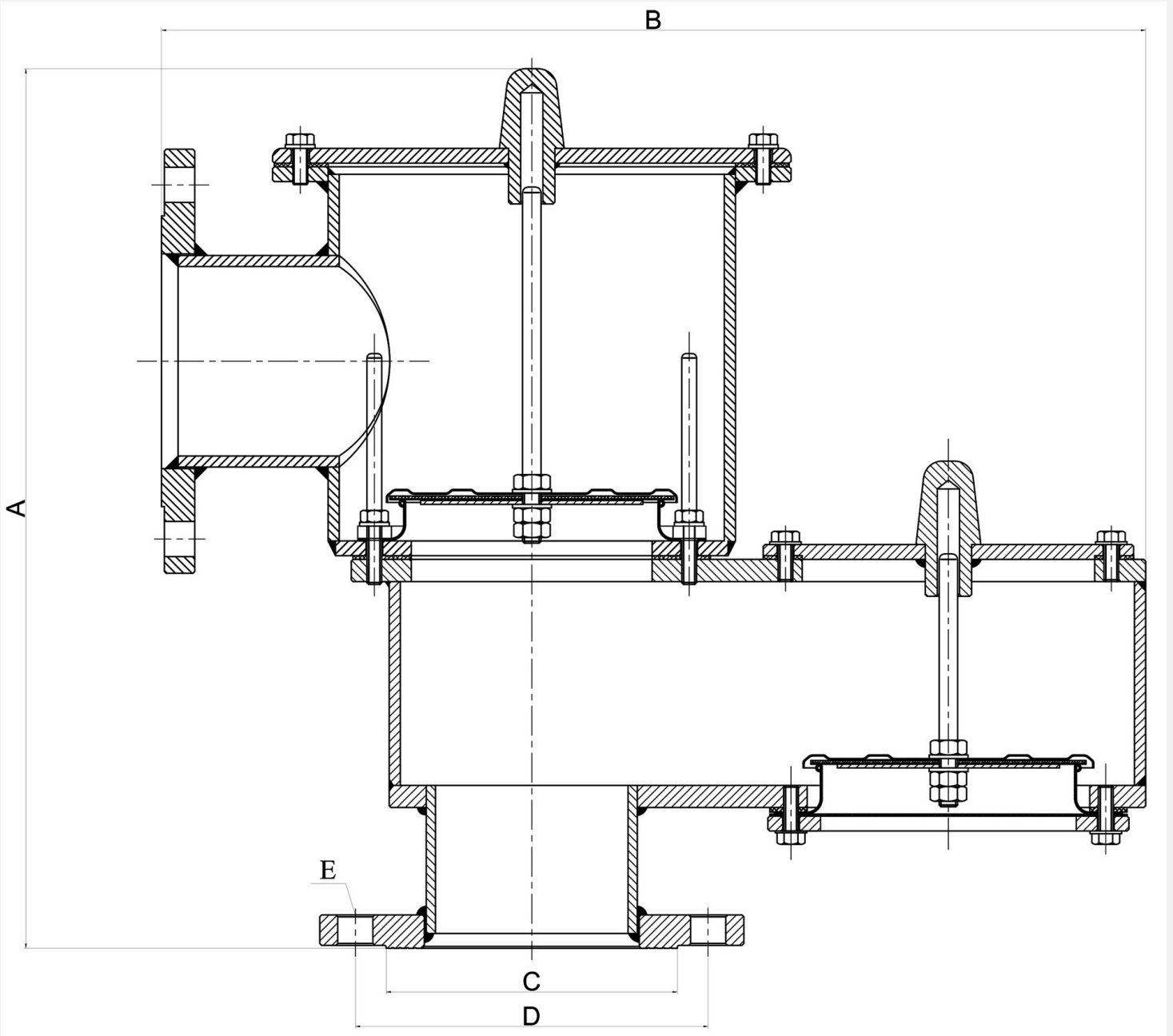


Key Features

- Easy to install. Do not need a special tool or experience.
- Transferring vapour content to collection system or condensation units.
- Prevent certain fire hazards.
- Light weight construction.
- Quick and easy to install, inspect and clean.
- Any grade materials are available.
- Has stainless steel pallets.
- Special designs can be achieved upon request to meet individual specifications.
- Eliminate the intake of air content (if needed) and the escape of vapors.
- Internal materials are resistant to winter conditions.
- Vacuum and relief cases can be managed effectively as per the set requirements of bulk storage tank.

- Super Duo technology provides extra curves and perfect seating with zero leakage.
- Set values can be arranged as per the site conditions, no need supervising.
- Design, manufacturing and test according to EN ISO 80079-36.
- PTFE, XYLAN, Rubber lining, etc. coating options are available.
- ANSI, DIN, JIS, API, etc. any special end connections are available.
- Breathing requirements are fulfilled according to API 2000 7th Edition.
- Diaphragm is manufactured from PTFE material to prevent possibility of ice formation and sticky residues hindering the valve from opening, while the pallet assembly moves freely on guide posts.

Technical Drawing

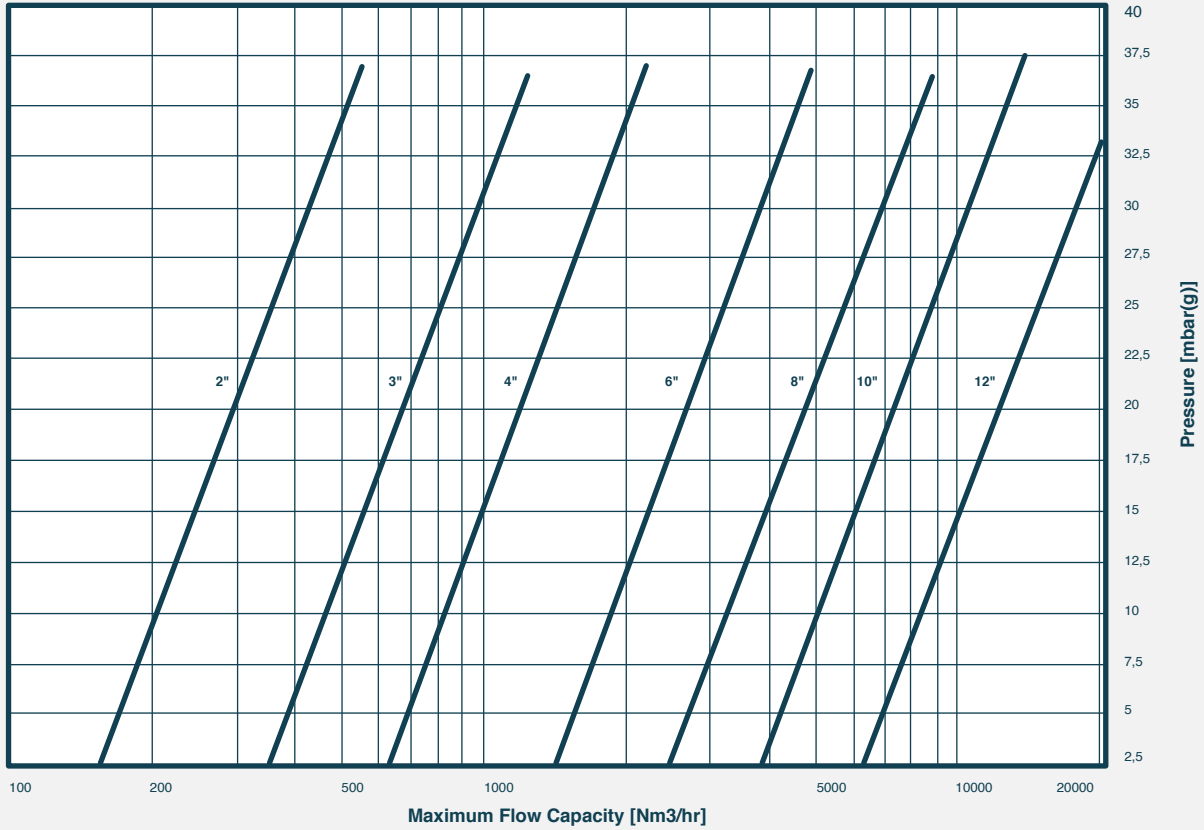


Weight & Dimensions

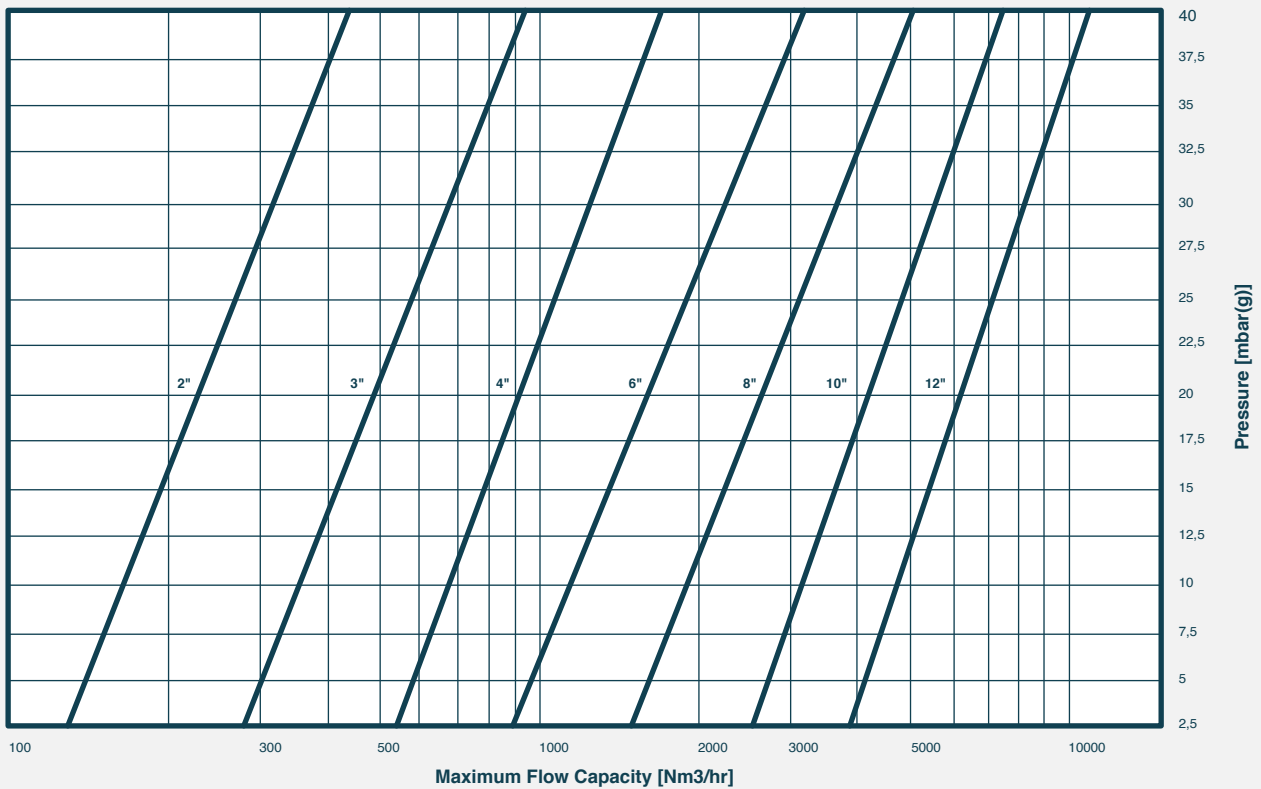
SIZE		A	B	C		D		E		TOTAL WEIGHT (kg)
NPS	DN			ANSI 150# RF	PN 16	ANSI 150# RF	DN	ANSI 150# RF	DN	
2"	50	338	330	Ø92.1	Ø102	Ø120.6	Ø125	Ø19x4	Ø18x4	20
3"	80	368	414	Ø127	Ø138	Ø152.4	Ø160	Ø19x4	Ø18x8	28,5
4"	100	462	532	Ø157.2	Ø158	Ø190.5	Ø180	Ø19x8	Ø18x8	40
6"	150	555	652	Ø215.9	Ø212	Ø241.3	Ø240	Ø22.2x8	Ø22x8	65
8"	200	673	900	Ø269.9	Ø268	Ø298.4	Ø295	Ø22.2x12	Ø22x12	110
10"	250	740	1020	Ø323.8	Ø320	Ø362	Ø355	Ø25.4x12	Ø26x12	147
12"	300	840	1150	Ø381	Ø378	Ø431.8	Ø410	Ø25.4x12	Ø26x12	195

Flow Capacity Tables

Pressure Capacity Graphic



Vacuum Capacity Graphic

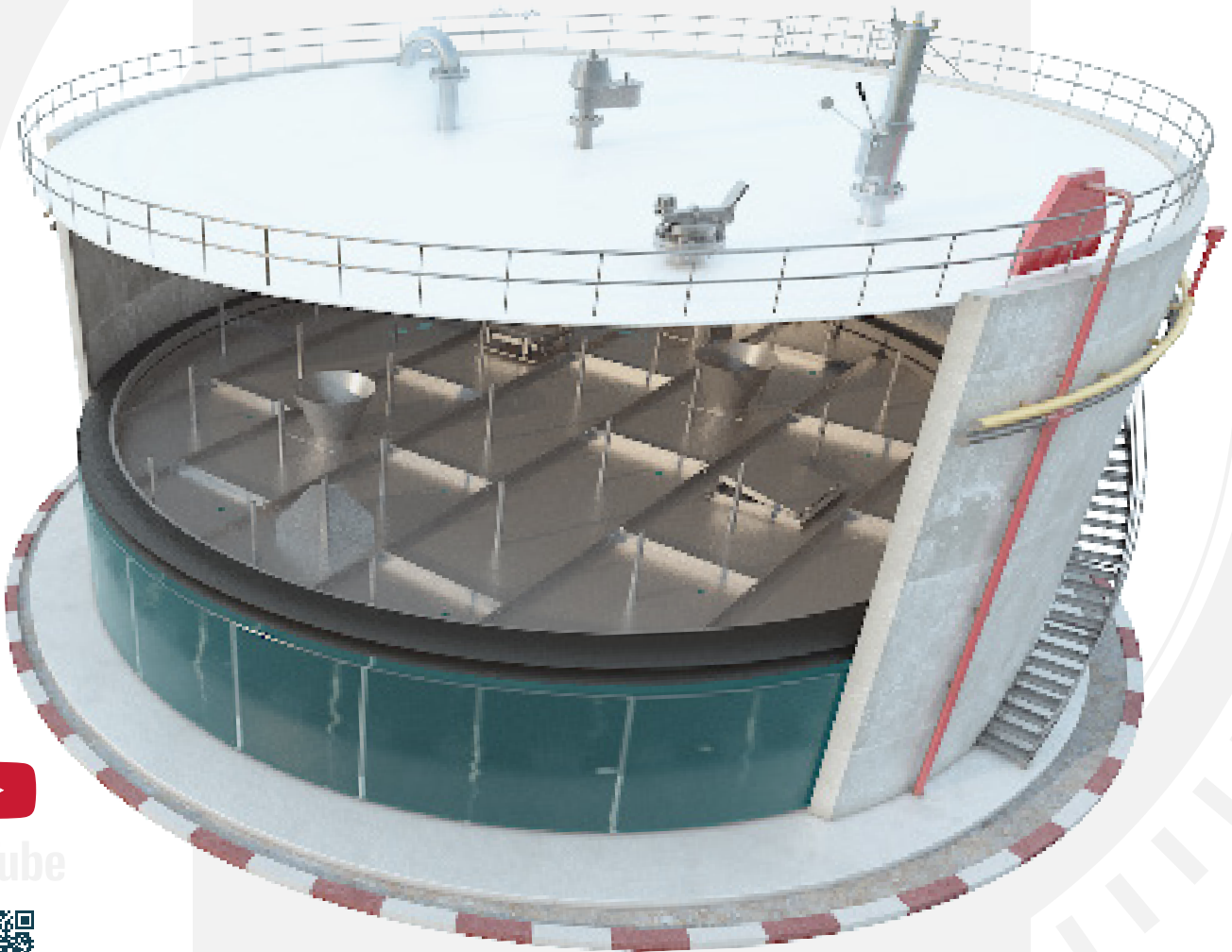


Flow Capacity Tables

PRESSURE RELIEF CAPACITIES [Nm ³ /hr] - OVERPRESSURE WEIGHTED														
mbar (g)	2"		3"		4"		6"		8"		10"		12"	
	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%
2,5	150	163	339	367	603	653	1356	1468	2413	2613	3777	4089	5439	5888
5	213	230	480	519	853	924	1917	2076	3414	3696	5342	5783	7691	8326
7,5	275	297	620	671	1104	1195	2479	2683	4415	4779	6907	7478	9943	10764
10	302	327	679	735	1207	1306	2711	2935	4827	5225	7554	8177	10876	11774
12,5	329	356	738	799	1309	1417	2943	3186	5239	5671	8200	8877	11809	12784
15	356	386	797	863	1412	1528	3175	3437	5651	6117	8846	9577	13309	14408
17,5	384	415	856	926	1514	1639	3407	3689	6063	6563	9493	10277	14502	15700
20	426	461	960	1040	1706	1847	3812	4126	6823	7387	10678	11559	15374	16644
22,5	469	507	1065	1153	1898	2054	4216	4564	7584	8210	11862	12842	15940	17256
25	476	516	1070	1159	1906	2064	4285	4639	7628	8258	11936	12921	17178	18597
27,5	484	524	1076	1165	1915	2073	4353	4713	7671	8305	12009	13000	18417	19937
30	522	565	1176	1273	2088	2261	4692	5080	8355	9045	12201	13209	18824	20379

VACUUM RELIEF CAPACITIES [Nm ³ /hr] - OVERPRESSURE WEIGHTED														
mbar (g)	2"		3"		4"		6"		8"		10"		12"	
	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%
2,5	119	127	268	285	567	604	963	1026	1549	1651	2739	2918	3906	4161
5	182	194	347	369	653	695	1363	1452	2145	2286	3324	3542	4780	5062
7,5	245	261	426	454	706	752	1772	1888	2628	2800	3561	3794	5313	5660
10	254	270	505	538	777	828	2127	2266	3042	3241	3888	4143	5284	6024
12,5	262	279	550	586	936	998	2339	2492	3301	3517	4216	4492	5995	6387
15	286	304	593	632	1017	1083	2526	2692	3638	3876	4452	4744	6101	6955
17,5	309	329	658	701	1140	1214	2678	2853	4004	4266	4888	5208	7061	7532
20	361	384	708	755	1279	1363	2785	2967	4296	4577	5580	5945	7735	8018
22,5	412	439	768	819	1317	1403	2869	3056	4588	4888	6272	6683	9492	10113
25	398	424	817	871	1344	1431	2926	3117	4811	5125	6708	7147	9369	10681
27,5	384	409	861	918	1396	1488	2984	3180	5042	5372	7143	7611	10558	11248
30	439	467	910	969	1772	1888	3044	3243	5312	5659	7703	8207	11338	12080

Floating Roof & SEALS



YouTube



Certificates & Standards



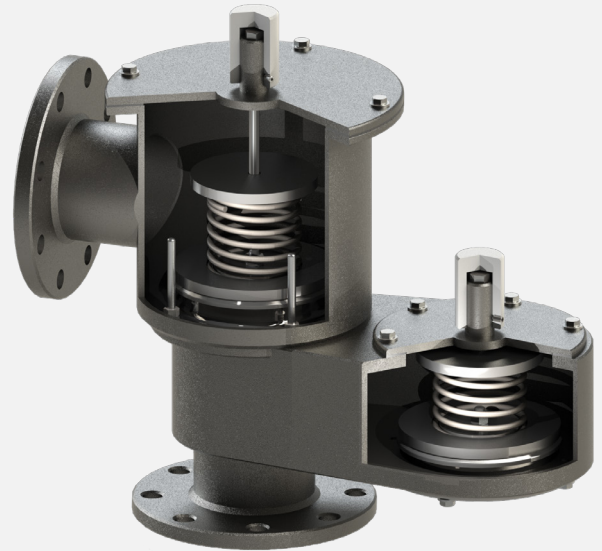
Pressure Vacuum Relief Valve

Top mounted, pipe-away, spring loaded
Model 121



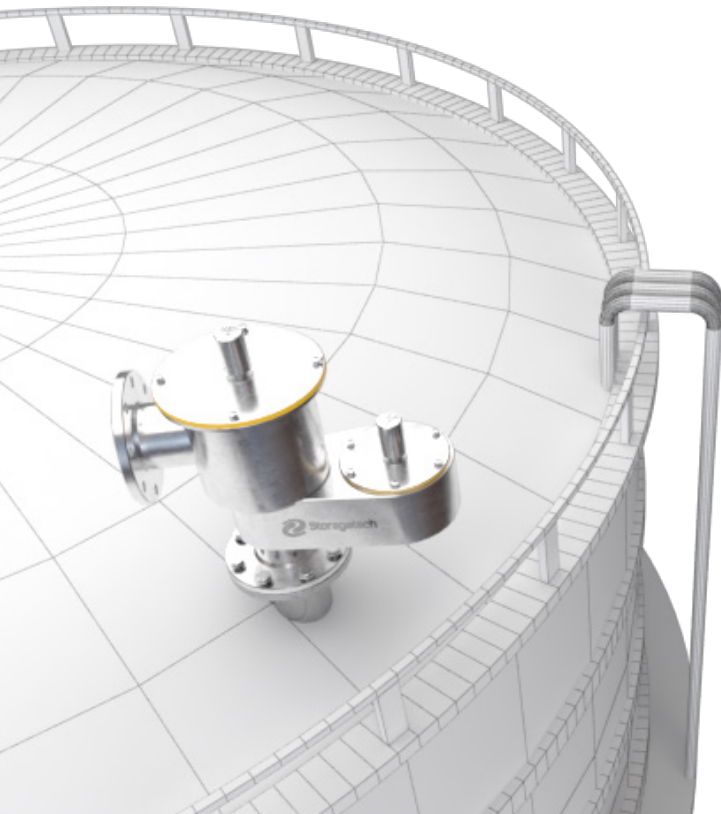
Product Description

Storagetech™ 's Model 121 Top Mounted, Pipe-Away, Spring Loaded Pressure Vacuum Relief Valve provides protection to bulk storage tanks and vessels from over and under pressurisation. The valves are mounted on the tank roof flange or a vent pipe from the vapour space. Sytem is especially preferred for transferring vapour content to collection system or condensation units, even prevent certain fire hazards. The pressure / vacuum relief pallet and diaphragm assembly is held tightly against a seal to prevent the loss of vapour to atmosphere in the closed position. Due to product filling and vapour development, the pressure in tank increases and in the event that the set pressure of the unit is reached. Accordingly the diaphragm will be opened and discharge the gas to system. System back pressure are also included in balance calculations to achieve desired certain seat and re-seat actions. The vacuum pallet and diaphragm assembly is similarly maintained in the closed position. As the internal pressure in the tank reduces, due to emptying vacuum conditions occurs, the balance between the tank pressure and the external atmospheric pressure changes. Accordingly when the set pressure of the unit is reached, the diaphragm opens to vacuum air content and rebalance the internal pressure. Storagetech Valves Activated as close as to set pressures, less than 10% of set pressures, ensuring accurate pressure management and isolate emission losses perfectly.



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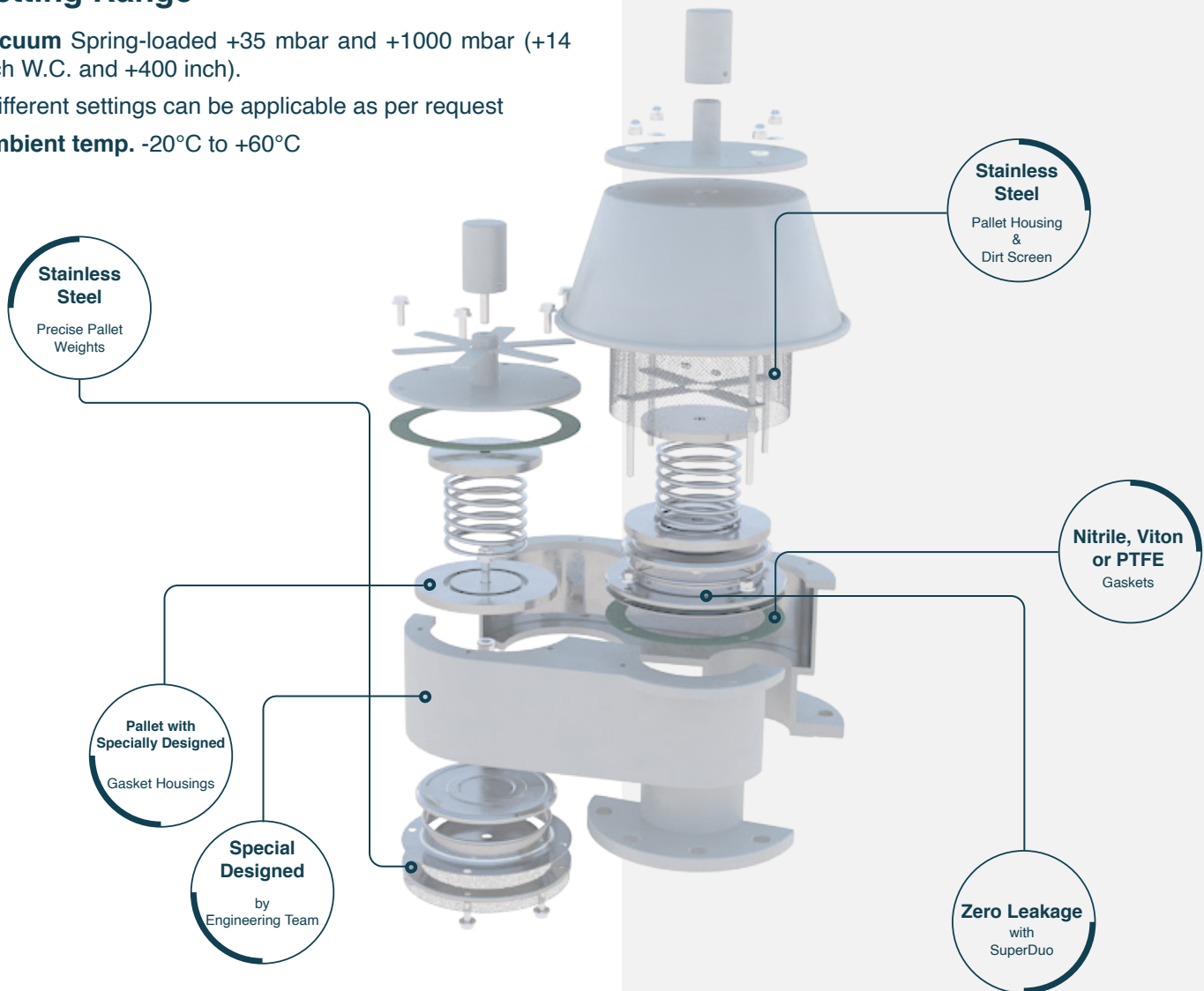
Standard Sizes	2" to 12" (DN50 to DN300) Further sizes are applicable upon request.
Flanges	ANSI, DIN, JIS, BSP
Body	Carbon Steel, Stainless Steel or Aluminium
Seals	Klingrit, Nitrile, Viton, PTFE
Pallet	Stainless Steel AISI 304/316
Springs	Stainless Steel
Paint Finish	1. Customer Specification 2. Powder Coating, Colour RAL 9006 3. Epoxy Paint, Colour RAL 9006 4. PTFE Coating
ATEX Cert	Ex II 1/2 G c II B

Setting Range

Vacuum Spring-loaded +35 mbar and +1000 mbar (+14 inch W.C. and +400 inch).

*Different settings can be applicable as per request

Ambient temp. -20°C to +60°C

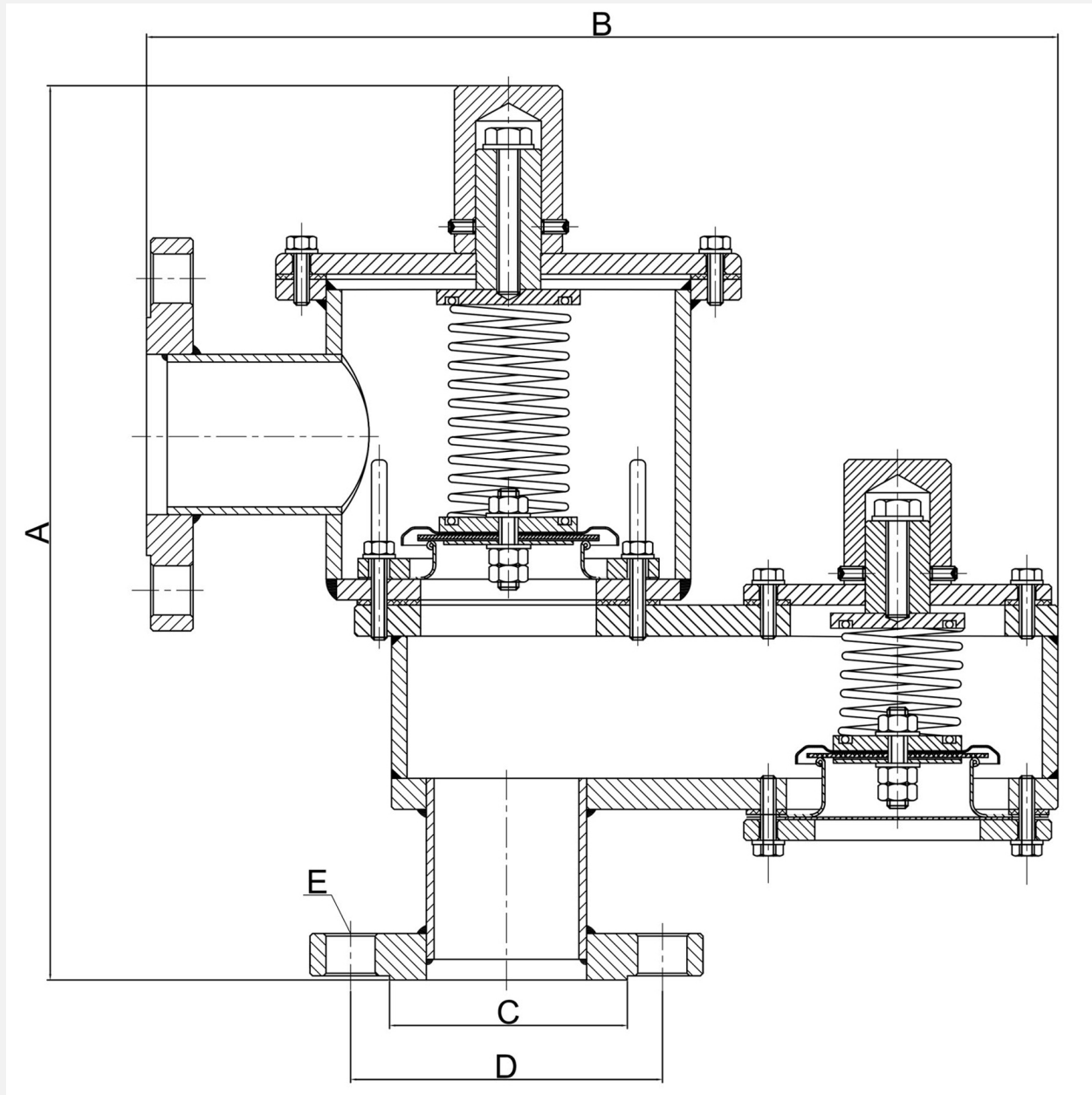


Key Features

- Easy to install. Do not need a special tool or experience.
- Transferring vapour content to collection system or condensation units.
- Prevent certain fire hazards.
- Light weight construction.
- Quick and easy to install, inspect and clean.
- Any grade materials are available.
- Has stainless steel pallets.
- Special designs can be achievable upon request to meet individual specifications.
- Eliminate the intake of air content (if needed) and the escape of vapors.
- Internal materials are resistant to winter conditions.
- Vacuum and relief cases can be managed effectively as per the set requirements of bulk storage tank.

- Super Duo technology provides extra curves and perfect seating with zero leakage.
- Set values can be arranged as per the site conditions, no need supervising.
- Design, manufacturing and test according to EN ISO 80079-36.
- PTFE, XYLAN, Rubber lining, etc. coating options are available.
- ANSI, DIN, JIS, API, etc. any special end connections are available.
- Breathing requirements are fulfilled according to API 2000 7th Edition.
- Diaphragm is manufactured from PTFE material to prevent possibility of ice formation and sticky residues hindering the valve from opening, while the pallet assembly moves freely on guide posts.

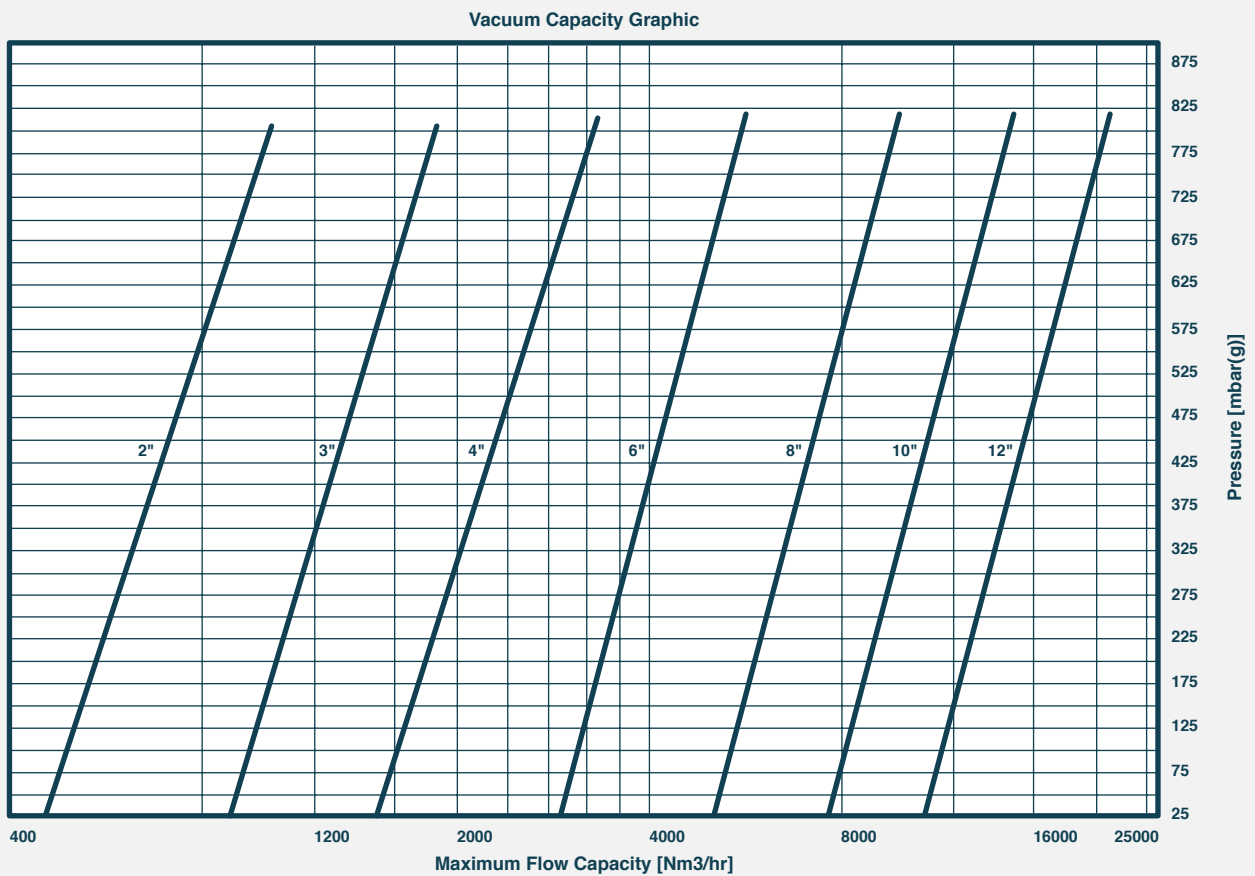
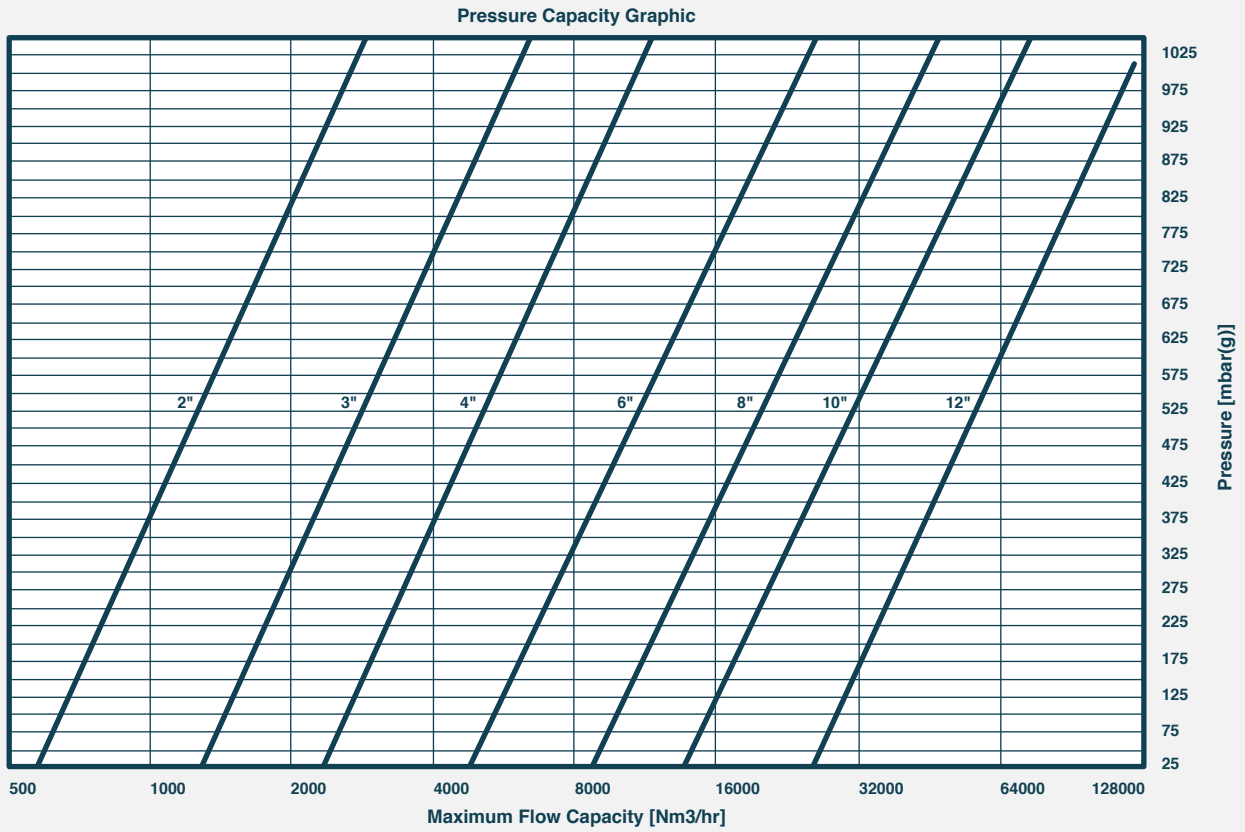
Technical Drawing



Weight & Dimensions

SIZE		A	B	C		D		E		TOTAL WEIGHT (kg)
NPS	DN			ANSI 150# RF	DN	ANSI 150# RF	DN	ANSI 150# RF	DN	
2"	50	363	329	Ø92.1	Ø102	Ø120.6	Ø125	Ø19x4	Ø18x4	22
3"	80	393	414	Ø127	Ø138	Ø152.4	Ø160	Ø19x4	Ø18x8	30
4"	100	489	532	Ø157.2	Ø158	Ø190.5	Ø180	Ø19x8	Ø18x8	42
6"	150	564	662	Ø215.9	Ø212	Ø241.3	Ø240	Ø22.2x8	Ø22x8	65
8"	200	680	957	Ø269.9	Ø268	Ø298.4	Ø295	Ø22.2x12	Ø22x12	114
10"	250	817	1020	Ø323.8	Ø320	Ø362	Ø355	Ø25.4x12	Ø26x12	152
12"	300	832	1146	Ø381	Ø378	Ø431.8	Ø410	Ø25.4x12	Ø26x12	200

Flow Capacity Tables



Flow Capacity Tables

PRESSURE RELIEF CAPACITIES [Nm³/hr] - OVERPRESSURE SPRING

mbar (g)	2"		3"		4"		6"		8"		10"		12"	
	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%
40	569	585	1282	1320	2277	2344	5090	5239	9111	9377	14260	14676	20533	21131
50	637	655	1434	1476	2546	2620	5721	5887	10185	10481	15936	16400	22948	23617
60	697	718	1569	1614	2788	2869	6264	6447	11153	11478	17453	17962	25130	25862
70	752	774	1694	1744	3011	3098	6764	6961	12043	12394	18845	19394	27133	27924
80	804	828	1811	1863	3217	3310	7229	7439	12869	13244	20139	20725	28997	29841
90	854	879	1921	1977	3411	3511	7665	7889	13645	14043	21352	21974	30744	31640
100	899	925	2024	2083	3595	3699	8075	8310	14379	14798	22500	23156	32397	33340
120	985	1013	2216	2280	3935	4049	8842	9099	15739	16198	24627	25345	35463	36496
140	1062	1093	2391	2460	4246	4369	9543	9821	16989	17484	26584	27359	38278	39393
160	1135	1168	2554	2629	4537	4669	10195	10492	18149	18677	28397	29224	40891	42082
180	1203	1238	2708	2787	4809	4949	10805	11119	19236	19797	30097	30973	43342	44605
200	1267	1304	2852	2935	5065	5212	11382	11713	20262	20852	31709	32632	45650	46979
240	1386	1427	3120	3211	5541	5703	12451	12813	22166	22811	34680	35690	49940	51394
280	1496	1539	3365	3463	5977	6151	13430	13821	23908	24605	37410	38499	53868	55437
300	1547	1592	3481	3583	6182	6362	13892	14296	24730	25451	38697	39824	55702	57325
350	1668	1716	3750	3859	6665	6859	14978	15415	26665	27441	41727	42943	60080	61830
400	1780	1832	4006	4122	7114	7321	15986	16451	28457	29286	44527	45824	64118	65985
450	1885	1940	4242	4365	7532	7752	16926	17419	30225	31106	47151	48525	67891	69869
500	1983	2041	4463	4593	7927	8158	17812	18331	31709	32632	49617	51062	71441	73522
550	2076	2137	4673	4809	8300	8541	18648	19191	33201	34168	51953	53466	74805	76984
600	2165	2228	4873	5015	8654	8906	19446	20013	34618	35627	54168	55745	77998	80270
650	2251	2316	5063	5211	8993	9255	20207	20795	35973	37021	56290	57929	81050	83410
700	2331	2399	5246	5399	9316	9588	20935	21545	37265	38351	58319	60017	83976	86422
750	2409	2479	5422	5580	9628	9909	21636	22266	38517	39639	60265	62021	86762	89289
800	2483	2556	5591	5754	9929	10218	22310	22960	39717	40874	62149	63959	89484	92091
850	2554	2629	5754	5921	10218	10515	22959	23627	40870	42061	63958	65821	92091	94774
900	2627	2703	5911	6083	10498	10804	23588	24275	41993	43216	65710	67624	94611	97366
950	2694	2773	6064	6240	10769	11082	24197	24902	43076	44330	67405	69369	97051	99877
1000	2762	2843	6216	6397	11036	11358	24800	25523	44149	45435	69099	71111	99467	102364

Flow Capacity Tables

VACUUM RELIEF CAPACITIES [Nm³/hr] - UNDERPRESSURE SPRING

mbar (g)	2"		3"		4"		6"		8"		10"		12"	
	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%
40	556	587	1031	1090	1813	1915	3138	3315	5475	5785	8260	8728	11686	12347
50	567	599	1052	1112	1849	1954	3200	3381	5584	5900	8425	8902	11920	12594
60	578	611	1073	1134	1886	1993	3264	3449	5696	6018	8594	9080	12158	12846
70	590	623	1095	1156	1924	2032	3330	3518	5810	6139	8766	9262	12401	13103
80	602	636	1116	1180	1962	2073	3396	3588	5926	6261	8941	9447	12649	13365
90	614	648	1139	1203	2001	2115	3464	3660	6045	6387	9120	9636	12902	13632
100	626	661	1162	1227	2041	2157	3533	3733	6165	6514	9302	9829	13160	13905
120	639	675	1185	1252	2082	2200	3604	3808	6289	6645	9488	10025	13423	14183
140	651	688	1208	1277	2124	2244	3676	3884	6415	6778	9678	10226	13692	14467
160	664	702	1233	1302	2166	2289	3750	3962	6543	6913	9872	10430	13966	14756
180	678	716	1257	1328	2210	2335	3825	4041	6674	7051	10069	10639	14245	15051
200	691	730	1282	1355	2254	2381	3901	4122	6807	7192	10270	10852	14530	15352
240	705	745	1308	1382	2299	2429	3979	4204	6943	7336	10476	11069	14820	15659
280	726	767	1347	1424	2368	2502	4099	4331	7152	7556	10790	11401	15265	16129
300	748	790	1388	1466	2439	2577	4222	4460	7366	7783	11114	11743	15723	16613
350	770	814	1429	1510	2512	2654	4348	4594	7587	8017	11447	12095	16195	17111
400	793	838	1472	1556	2587	2734	4479	4732	7815	8257	11791	12458	16681	17625
450	817	864	1516	1602	2665	2816	4613	4874	8049	8505	12144	12832	17181	18154
500	842	889	1562	1650	2745	2900	4751	5020	8291	8760	12509	13217	17696	18698
550	875	925	1624	1716	2855	3016	4941	5221	8622	9110	13009	13745	18404	19446
600	910	962	1689	1785	2969	3137	5139	5430	8967	9475	13529	14295	19140	20224
650	947	1000	1757	1856	3088	3262	5345	5647	9326	9854	14071	14867	19906	21033
700	985	1040	1827	1931	3211	3393	5558	5873	9699	10248	14633	15462	20702	21874
750	1024	1082	1900	2008	3340	3529	5781	6108	10087	10658	15219	16080	21530	22749
800	1065	1125	1976	2088	3473	3670	6012	6352	10490	11084	15828	16723	22392	23659

Pressure Relief Valve

Top mounted, pipe-away, weight loaded
Model 141



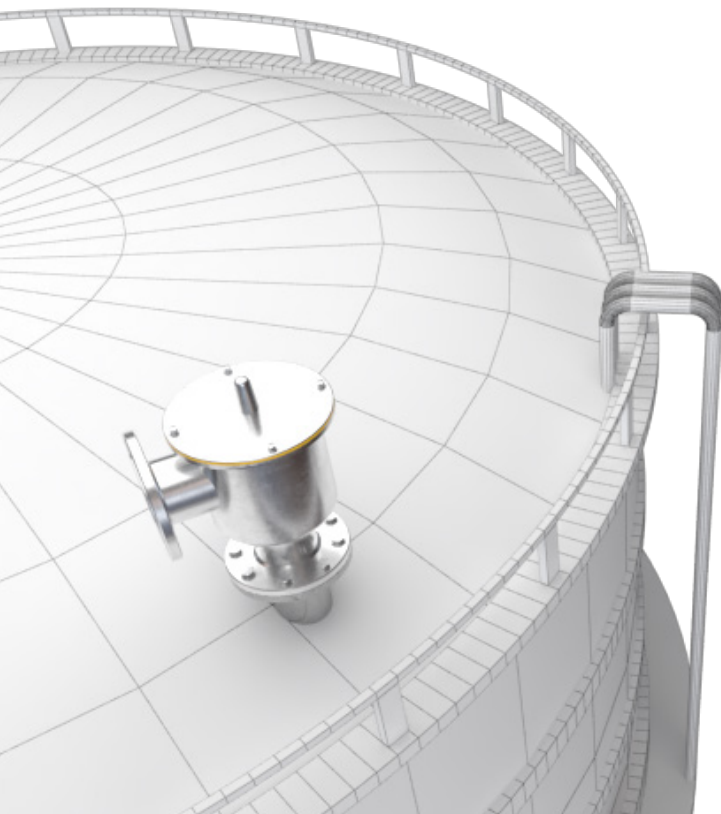
Product Description

Storagetech™ 's Model 141 Top Mounted, Pipe Away, Weight Loaded Pressure Relief Valve provides protection to bulk storage tanks and vessels from over and under pressurisation. The valves are mounted on the tank roof flange or a vent pipe from the vapour space. System is especially preferred for transferring vapour content to collection system or condensation units, even prevent certain fire hazards. The pressure relief pallet and diaphragm assembly is held tightly against a seal to prevent the loss of vapour to atmosphere in the closed position. Due to product filling and vapour development, the pressure in tank increases and in the event that the set pressure of the unit is reached. Accordingly the diaphragm will be opened and discharge the gas to system. System back pressure are also included in balance calculations to achieve desired certain seat and re-seat actions. Storagetech Valves Activated as close as to set pressures, less than 10% of set pressures, ensuring accurate pressure management and isolate emission losses perfectly.



With 40 years of experience, Storagetech™ PVV systems offer effective solutions against unwanted evaporation and vacuums that may occur in tanks.

Thanks to PVV solutions produced completely in accordance with international norms, Storagetech™ is a reliable, sustainable and effective solution partner for your investments.



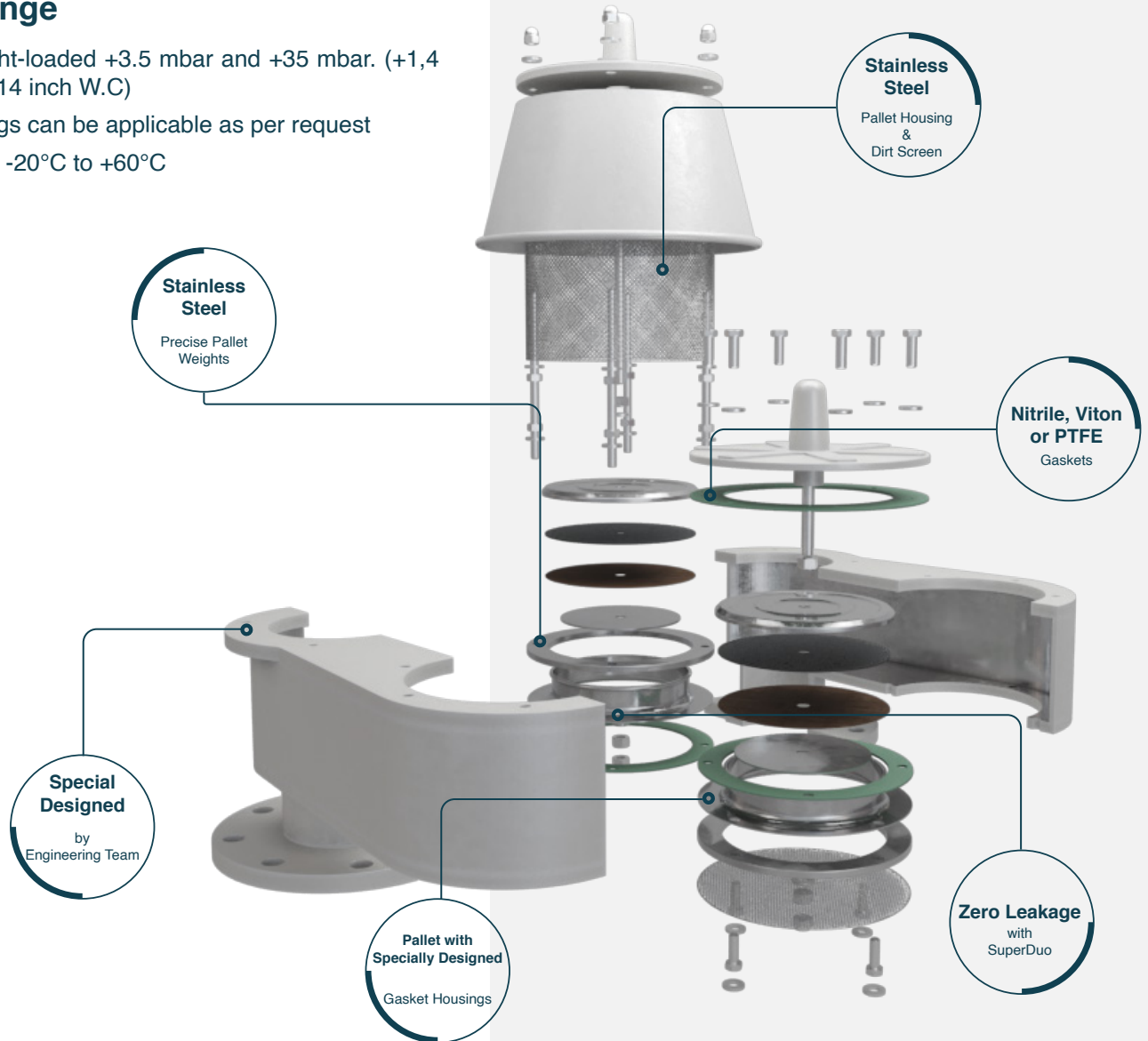
Standard Sizes	2" to 12" (DN50 to DN300) Further sizes are applicable upon request.
Flanges	ANSI, DIN, JIS, BSP
Body	Carbon Steel, Stainless Steel or Aluminium
Seals	Klingrit, Nitrile, Viton, PTFE
Pallet	Stainless Steel AISI 304/316
Springs	Stainless Steel
Paint Finish	1. Customer Specification 2. Powder Coating, Colour RAL 9006 3. Epoxy Paint, Colour RAL 9006 4. PTFE Coating
ATEX Cert	Ex II 1/2 G c II B

Setting Range

Pressure Weight-loaded +3.5 mbar and +35 mbar. (+1,4 inch W.C and +14 inch W.C)

*Different settings can be applicable as per request

Ambient temp. -20°C to +60°C

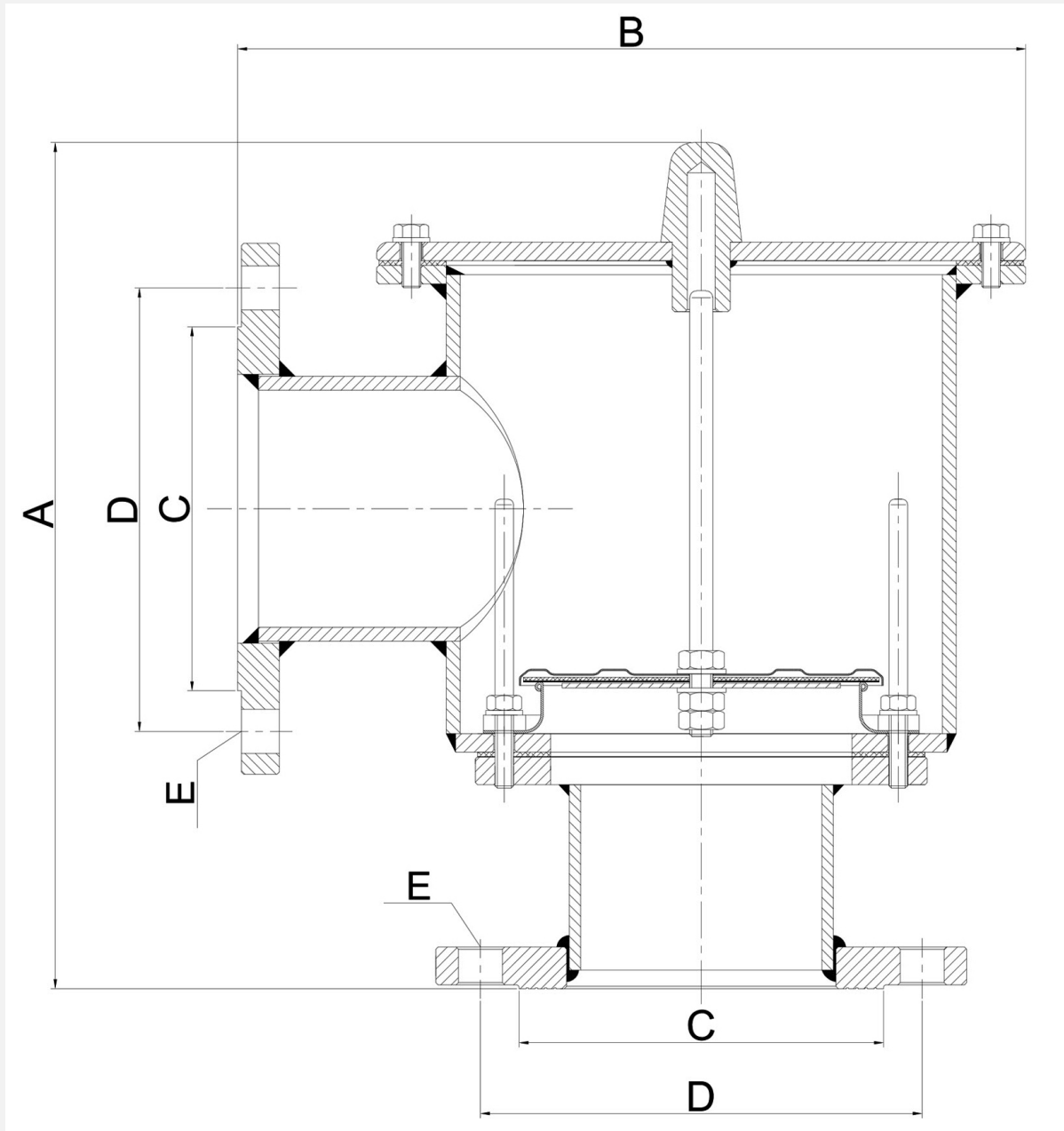


Key Features

- Easy to install. Do not need a special tool or experience.
- Transferring vapour content to collection system or condensation units.
- Prevent certain fire hazards.
- Light weight construction.
- Quick and easy to install, inspect and clean.
- Any grade materials are available.
- Has stainless steel pallets.
- Special designs can be achieved upon request to meet individual specifications.
- Eliminate the intake of air content (if needed) and the escape of vapors.
- Internal materials are resistant to winter conditions.
- Vacuum and relief cases can be managed effectively as per the set requirements of bulk storage tank.

- Super Duo technology provides extra curves and perfect seating with zero leakage.
- Set values can be arranged as per the site conditions, no need supervising.
- Design, manufacturing and test according to EN ISO 80079-36.
- PTFE, XYLAN, Rubber lining, etc. coating options are available.
- ANSI, DIN, JIS, API, etc. any special end connections are available.
- Breathing requirements are fulfilled according to API 2000 7th Edition.
- Diaphragm is manufactured from PTFE material to prevent possibility of ice formation and sticky residues hindering the valve from opening, while the pallet assembly moves freely on guide posts.

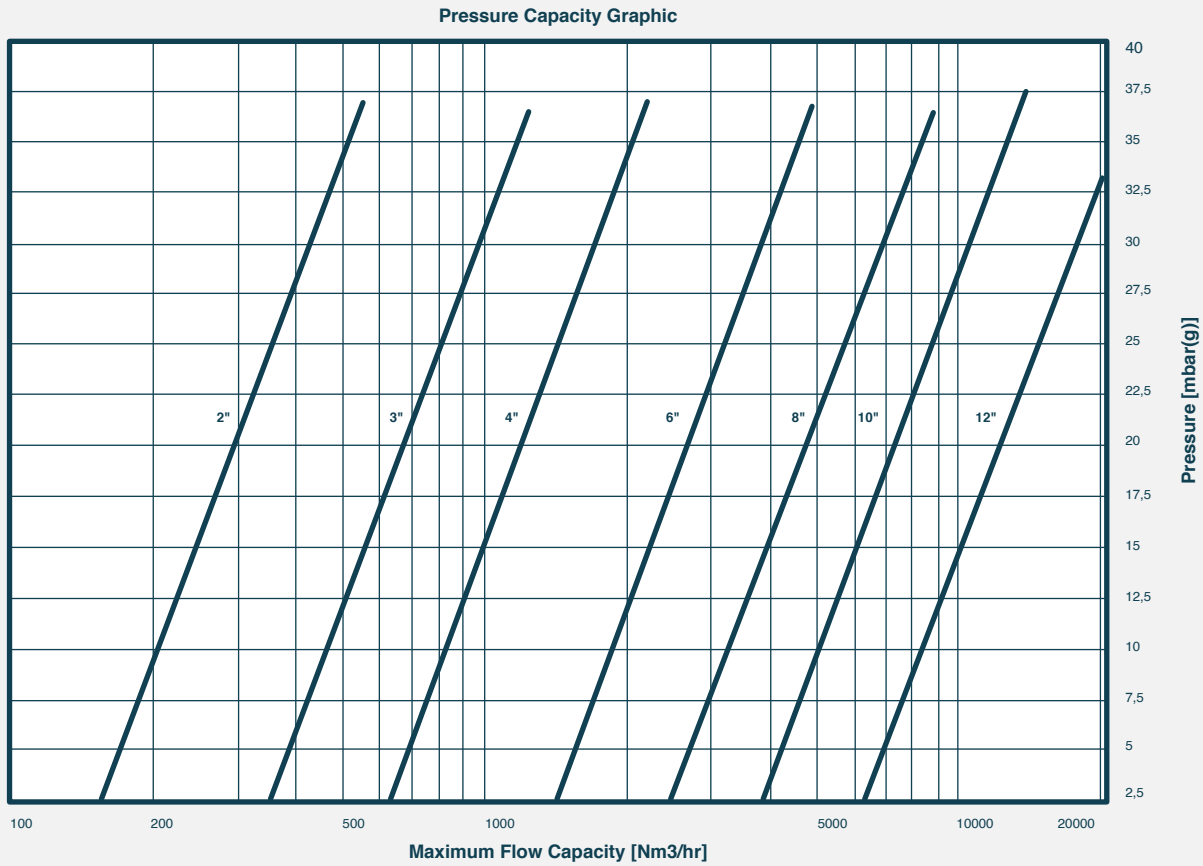
Technical Drawing



Weight & Dimensions

SIZE		A	B	C		D		E		TOTAL WEIGHT (kg)
NPS	DN			ANSI 150# RF	DN	ANSI 150# RF	DN	ANSI 150# RF	DN	
2"	50	287	230	Ø92.1	Ø102	Ø120.6	Ø125	Ø19x4	Ø18x4	14
3"	80	339	267	Ø127	Ø138	Ø152.4	Ø160	Ø19x4	Ø18x8	19
4"	100	481	340	Ø157.2	Ø158	Ø190.5	Ø180	Ø19x8	Ø18x8	25
6"	150	555	402	Ø215.9	Ø212	Ø241.3	Ø240	Ø22.2x8	Ø22x8	33
8"	200	500	605	Ø269.9	Ø268	Ø298.4	Ø295	Ø22.2x12	Ø22x12	70
10"	250	658	591	Ø323.8	Ø320	Ø362	Ø355	Ø25.4x12	Ø26x12	100
12"	300	702	680	Ø381	Ø378	Ø431.8	Ø410	Ø25.4x12	Ø26x12	125

Flow Capacity Tables



PRESSURE RELIEF CAPACITIES [Nm3/hr] - OVERPRESSURE WEIGHTED

mbar (g)	2"		3"		4"		6"		8"		10"		12"	
	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%
2,5	150	163	339	367	603	653	1356	1468	2413	2613	3777	4089	5439	5888
5	213	230	480	519	853	924	1917	2076	3414	3696	5342	5783	7691	8326
7,5	275	297	620	671	1104	1195	2479	2683	4415	4779	6907	7478	9943	10764
10	302	327	679	735	1207	1306	2711	2935	4827	5225	7554	8177	10876	11774
12,5	329	356	738	799	1309	1417	2943	3186	5239	5671	8200	8877	11809	12784
15	356	386	797	863	1412	1528	3175	3437	5651	6117	8846	9577	13309	14408
17,5	384	415	856	926	1514	1639	3407	3689	6063	6563	9493	10277	14502	15700
20	426	461	960	1040	1706	1847	3812	4126	6823	7387	10678	11559	15374	16644
22,5	469	507	1065	1153	1898	2054	4216	4564	7584	8210	11862	12842	15940	17256
25	476	516	1070	1159	1906	2064	4285	4639	7628	8258	11936	12921	17178	18597
27,5	484	524	1076	1165	1915	2073	4353	4713	7671	8305	12009	13000	18417	19937
30	522	565	1176	1273	2088	2261	4692	5080	8355	9045	12201	13209	18824	20379

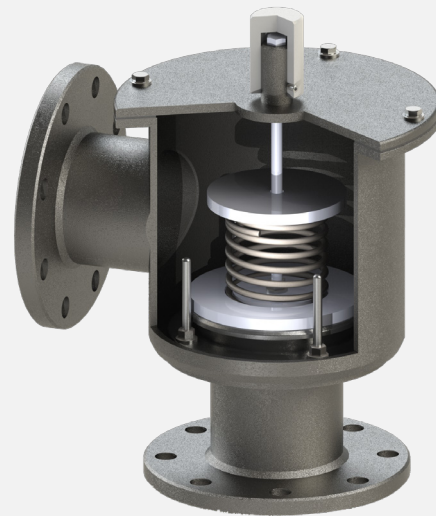
Pressure Relief Valve

Top mounted, pipe-away, spring loaded
Model 142



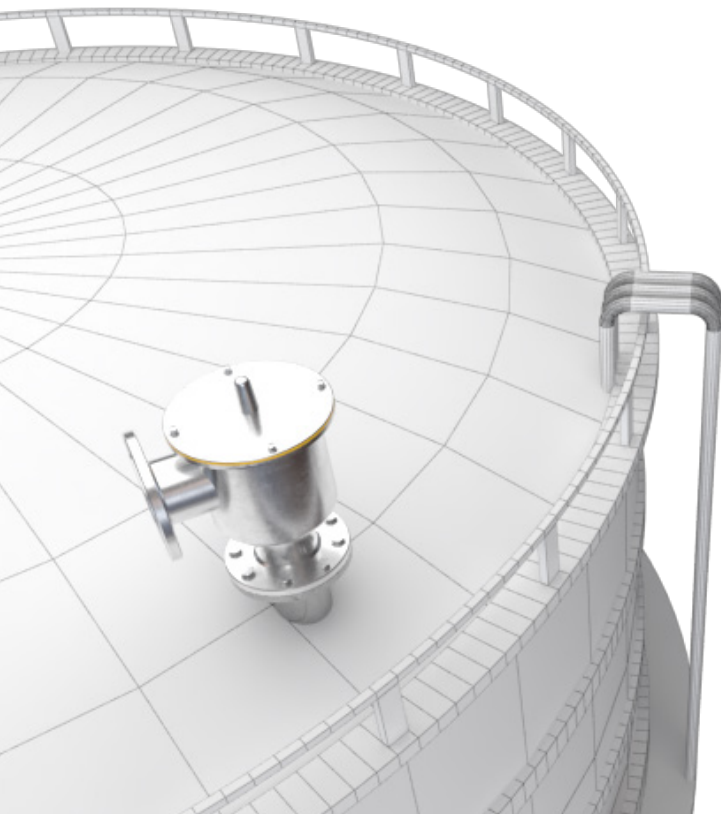
Product Description

Storagetech™ 's Model 142 Top Mounted, Pipe Away, Spring Loaded Pressure Relief Valve provides protection to bulk storage tanks and vessels from over and under pressurisation. The valves are mounted on the tank roof flange or a vent pipe from the vapour space. Sytem is especially prefered for transferring vapour content to collection system or condensation units, even prevent certain fire hazards. The pressure relief pallet and diaphragm assembly is held tightly against a seal to prevent the loss of vapour to atmosphere in the closed position. Due to product filling and vapour development, the pressure in tank increases and in the event that the set pressure of the unit is reached. Accordingly the diaphragm will be opened and discharge the gas to system. System back pressure are also included in balance calculations to achieve desired certain seat and re-seat actions. Storagetech Valves Activated as close as to set pressures, less than 10% of set)ressures, ensuring accurate pressure management and isolate emission losses perfectly.



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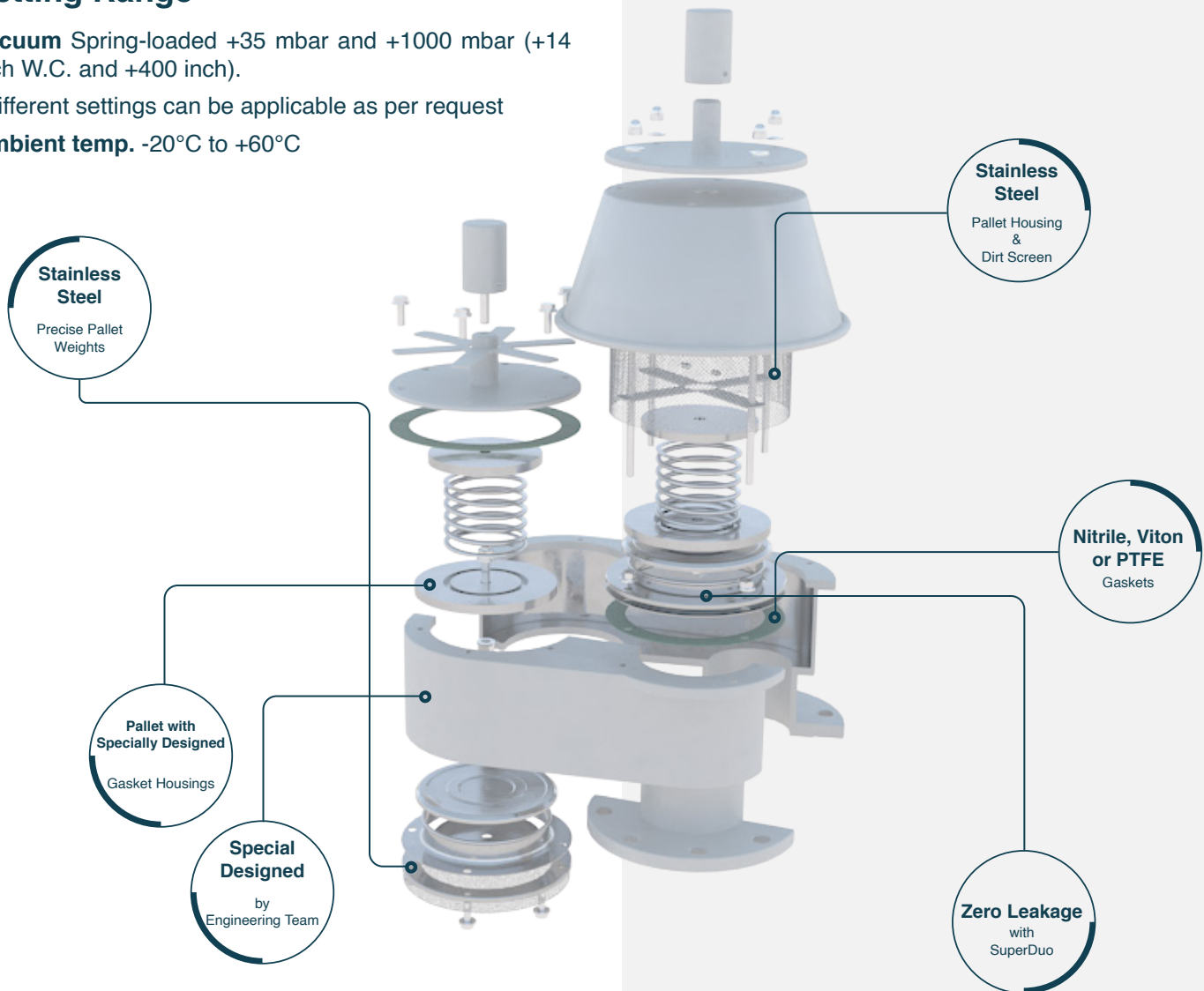
Standard Sizes	2" to 12" (DN50 to DN300) Further sizes are applicable upon request.
Flanges	ANSI, DIN, JIS, BSP
Body	Carbon Steel, Stainless Steel or Aluminium
Seals	Klingrit, Nitrile, Viton, PTFE
Pallet	Stainless Steel AISI 304/316
Springs	Stainless Steel
Paint Finish	1. Customer Specification 2. Powder Coating, Colour RAL 9006 3. Epoxy Paint, Colour RAL 9006 4. PTFE Coating
ATEX Cert	Ex II 1/2 G c II B

Setting Range

Vacuum Spring-loaded +35 mbar and +1000 mbar (+14 inch W.C. and +400 inch).

*Different settings can be applicable as per request

Ambient temp. -20°C to +60°C

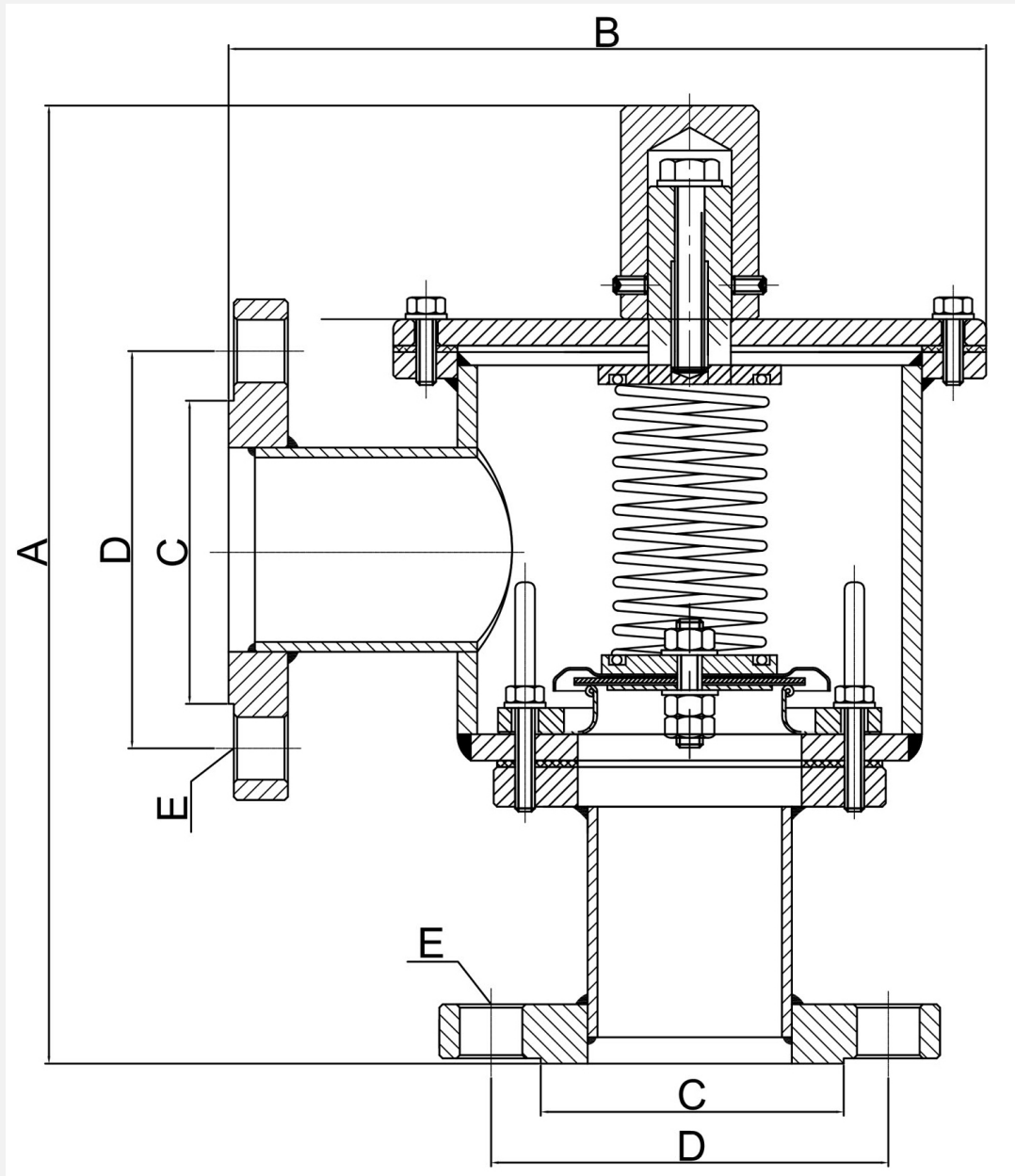


Key Features

- Easy to install. Do not need a special tool or experience.
- Transferring vapour content to collection system or condensation units.
- Prevent certain fire hazards.
- Light weight construction.
- Quick and easy to install, inspect and clean.
- Any grade materials are available.
- Has stainless steel pallets.
- Special designs can be achievable upon request to meet individual specifications.
- Eliminate the intake of air content (if needed) and the escape of vapors.
- Internal materials are resistant to winter conditions.
- Vacuum and relief cases can be managed effectively as per the set requirements of bulk storage tank.

- Super Duo technology provides extra curves and perfect seating with zero leakage.
- Set values can be arranged as per the site conditions, no need supervising.
- Design, manufacturing and test according to EN ISO 80079-36.
- PTFE, XYLAN, Rubber lining, etc. coating options are available.
- ANSI, DIN, JIS, API, etc. any special end connections are available.
- Breathing requirements are fulfilled according to API 2000 7th Edition.
- Diaphragm is manufactured from PTFE material to prevent possibility of ice formation and sticky residues hindering the valve from opening, while the pallet assembly moves freely on guide posts.

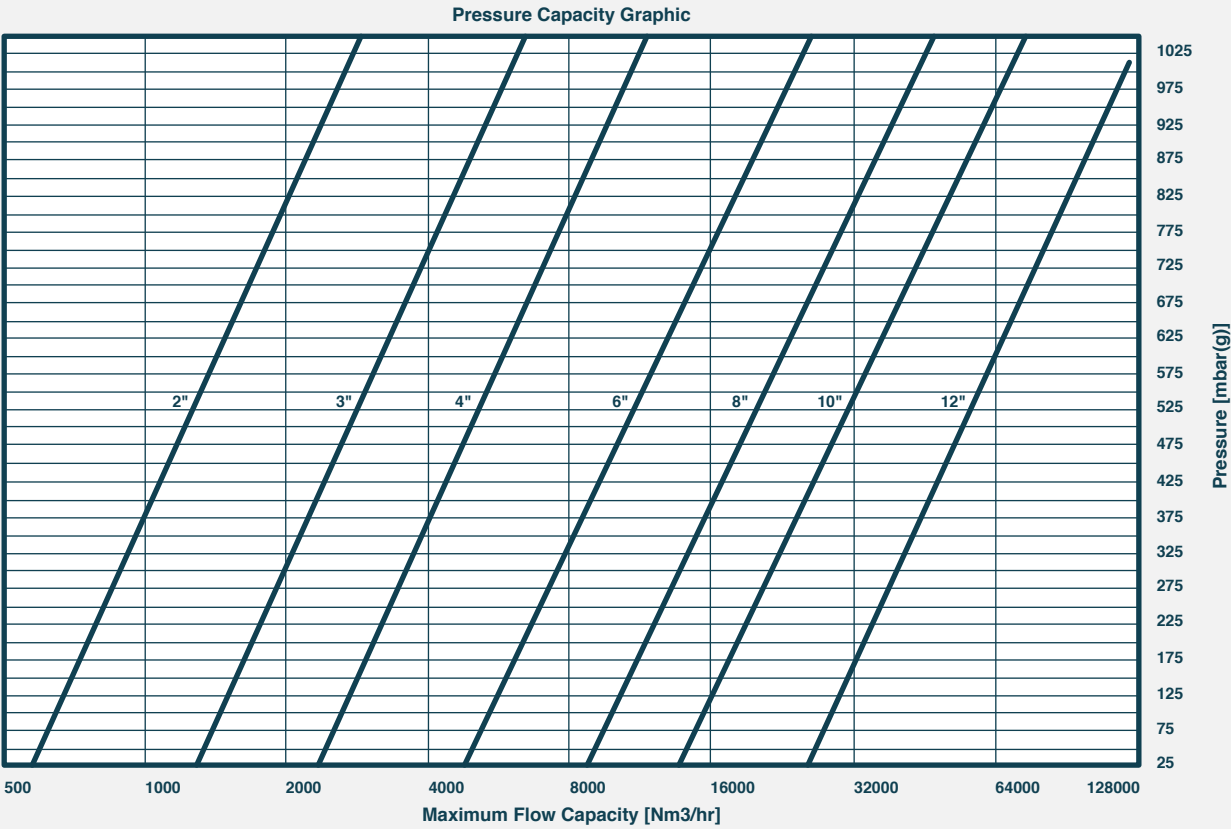
Technical Drawing



Weight & Dimensions

SIZE		A	B	C		D		E		TOTAL WEIGHT (kg)
NPS	DN			ANSI 150# RF	DN	ANSI 150# RF	DN	ANSI 150# RF	DN	
2"	50	305	230	Ø92.1	Ø102	Ø120.6	Ø125	Ø19x4	Ø18x4	15
3"	80	339	267	Ø127	Ø138	Ø152.4	Ø160	Ø19x4	Ø18x8	20
4"	100	498	340	Ø157.2	Ø158	Ø190.5	Ø180	Ø19x8	Ø18x8	27
6"	150	520	340	Ø215.9	Ø212	Ø241.3	Ø240	Ø22.2x8	Ø22x8	36
8"	200	507	605	Ø269.9	Ø268	Ø298.4	Ø295	Ø22.2x12	Ø22x12	73
10"	250	653	591	Ø323.8	Ø320	Ø362	Ø355	Ø25.4x12	Ø26x12	105
12"	300	690	680	Ø381	Ø378	Ø431.8	Ø410	Ø25.4x12	Ø26x12	133

Flow Capacity Tables

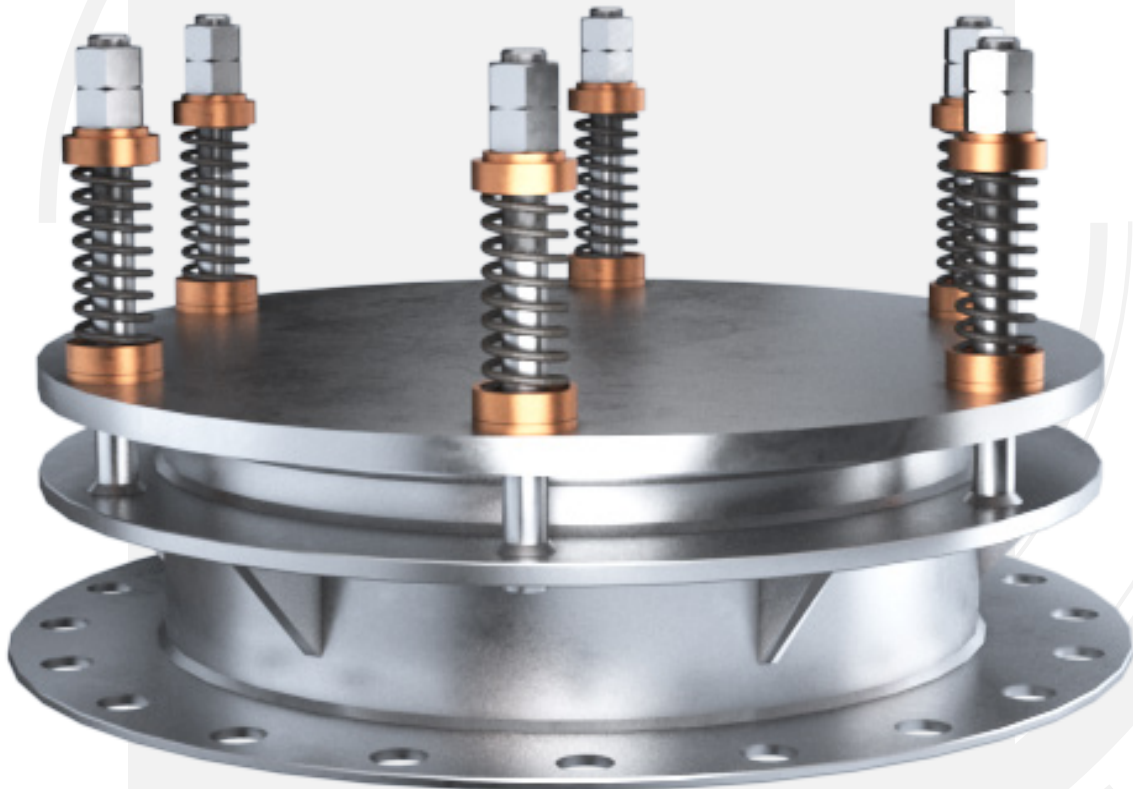


Flow Capacity Tables

PRESSURE RELIEF CAPACITIES [Nm³/hr] - OVERPRESSURE SPRING

mbar (g)	2"		3"		4"		6"		8"		10"		12"	
	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%
40	569	585	1282	1320	2277	2344	5090	5239	9111	9377	14260	14676	20533	21131
50	637	655	1434	1476	2546	2620	5721	5887	10185	10481	15936	16400	22948	23617
60	697	718	1569	1614	2788	2869	6264	6447	11153	11478	17453	17962	25130	25862
70	752	774	1694	1744	3011	3098	6764	6961	12043	12394	18845	19394	27133	27924
80	804	828	1811	1863	3217	3310	7229	7439	12869	13244	20139	20725	28997	29841
90	854	879	1921	1977	3411	3511	7665	7889	13645	14043	21352	21974	30744	31640
100	899	925	2024	2083	3595	3699	8075	8310	14379	14798	22500	23156	32397	33340
120	985	1013	2216	2280	3935	4049	8842	9099	15739	16198	24627	25345	35463	36496
140	1062	1093	2391	2460	4246	4369	9543	9821	16989	17484	26584	27359	38278	39393
160	1135	1168	2554	2629	4537	4669	10195	10492	18149	18677	28397	29224	40891	42082
180	1203	1238	2708	2787	4809	4949	10805	11119	19236	19797	30097	30973	43342	44605
200	1267	1304	2852	2935	5065	5212	11382	11713	20262	20852	31709	32632	45650	46979
240	1386	1427	3120	3211	5541	5703	12451	12813	22166	22811	34680	35690	49940	51394
280	1496	1539	3365	3463	5977	6151	13430	13821	23908	24605	37410	38499	53868	55437
300	1547	1592	3481	3583	6182	6362	13892	14296	24730	25451	38697	39824	55702	57325
350	1668	1716	3750	3859	6665	6859	14978	15415	26665	27441	41727	42943	60080	61830
400	1780	1832	4006	4122	7114	7321	15986	16451	28457	29286	44527	45824	64118	65985
450	1885	1940	4242	4365	7532	7752	16926	17419	30225	31106	47151	48525	67891	69869
500	1983	2041	4463	4593	7927	8158	17812	18331	31709	32632	49617	51062	71441	73522
550	2076	2137	4673	4809	8300	8541	18648	19191	33201	34168	51953	53466	74805	76984
600	2165	2228	4873	5015	8654	8906	19446	20013	34618	35627	54168	55745	77998	80270
650	2251	2316	5063	5211	8993	9255	20207	20795	35973	37021	56290	57929	81050	83410
700	2331	2399	5246	5399	9316	9588	20935	21545	37265	38351	58319	60017	83976	86422
750	2409	2479	5422	5580	9628	9909	21636	22266	38517	39639	60265	62021	86762	89289
800	2483	2556	5591	5754	9929	10218	22310	22960	39717	40874	62149	63959	89484	92091
850	2554	2629	5754	5921	10218	10515	22959	23627	40870	42061	63958	65821	92091	94774
900	2627	2703	5911	6083	10498	10804	23588	24275	41993	43216	65710	67624	94611	97366
950	2694	2773	6064	6240	10769	11082	24197	24902	43076	44330	67405	69369	97051	99877
1000	2762	2843	6216	6397	11036	11358	24800	25523	44149	45435	69099	71111	99467	102364

Emergency Pressure **RELIEF VENT** (Spring Loaded)



Certificates & Standards



Pressure Relief Valve

End-of-line, weight loaded
Model 140



Product Description

Storagetech™ 's Model 140 End of Line, Weight Loaded Pressure Relief Valve is designed to protect the tank from excessive internal pressure during operation.

The weighted-loaded pallet and diaphragm assembly is held tightly against a seal to prevent the loss of vapour to atmosphere in the closed position.

As the internal pressure in the tank increases, due to product filling or vapour development, the set pressure is reached, accordingly, the diaphragm shall be opened and discharge the gas to atmosphere.

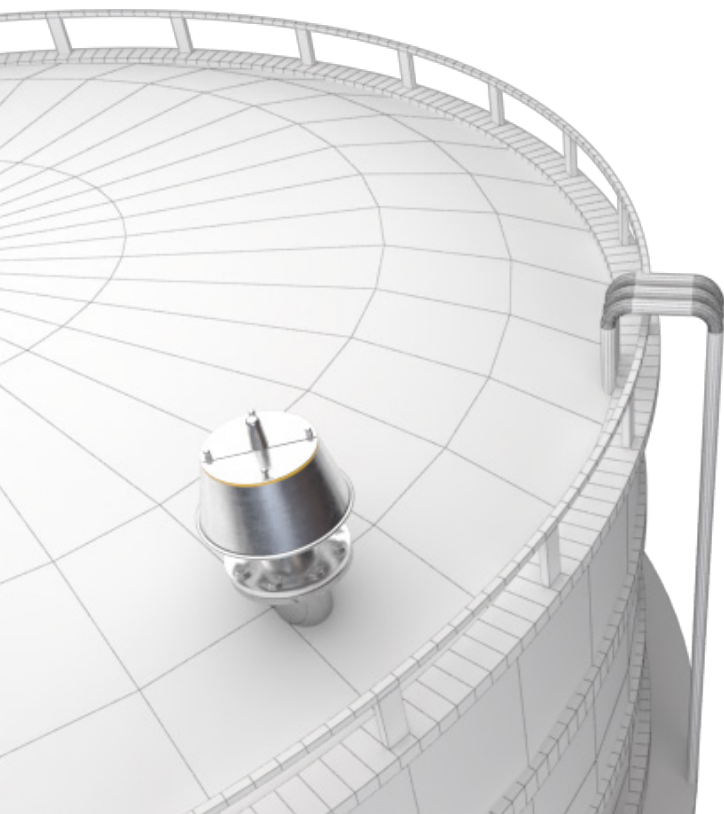
When the tank come into normal operation range, the valve shall be seated again.

Storagetech Valves Activated as close as to set pressures, less than 10% of set pressures, ensuring accurate pressure management and isolate emission losses perfectly.



With 40 years of experience, Storagetech™ PVV systems offer effective solutions against unwanted evaporation and vacuums that may occur in tanks.

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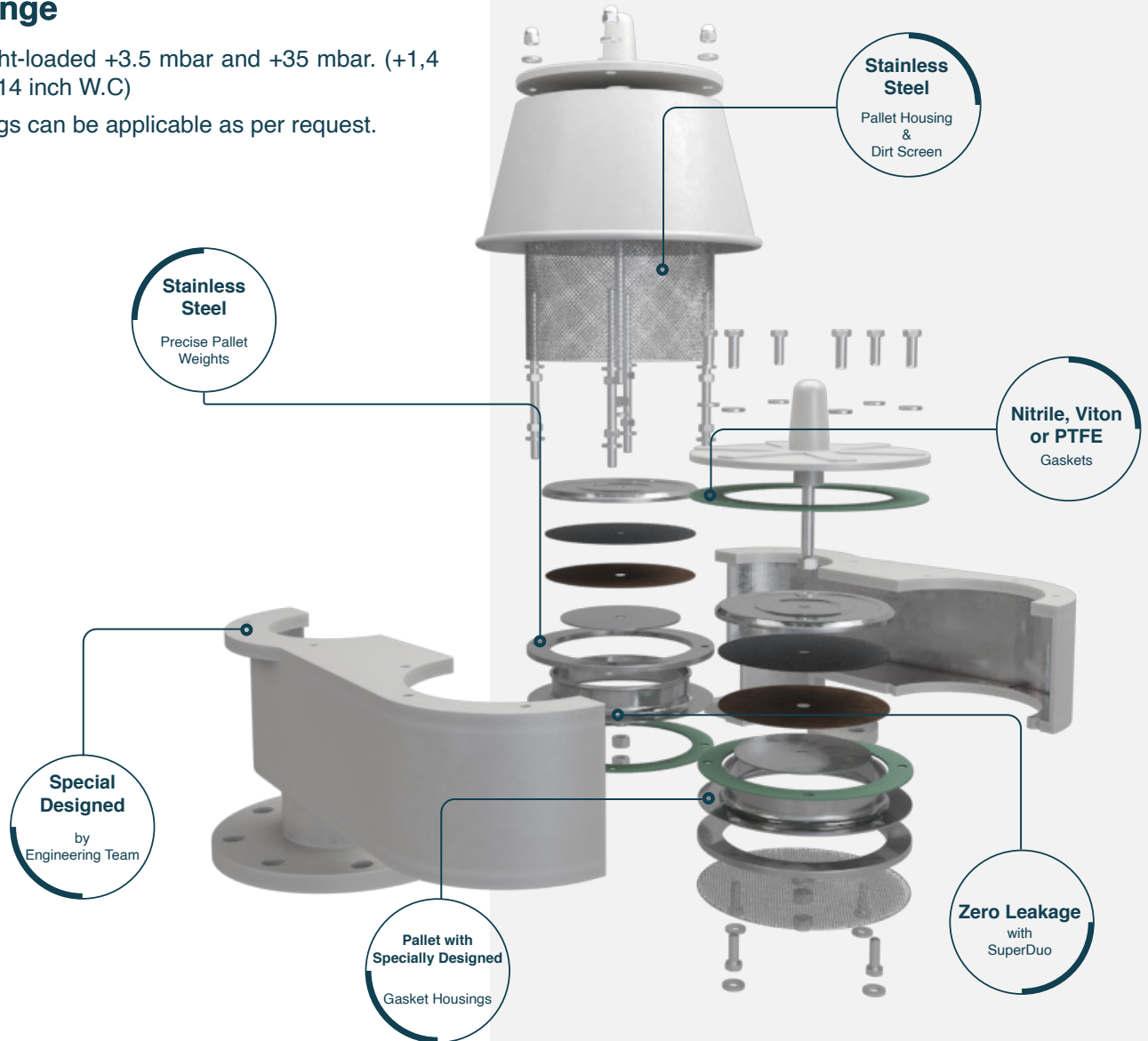


Standard Sizes	2" to 12" (DN50 to DN300) Further sizes are applicable upon request.
Flanges	ANSI, DIN, JIS, BSP
Body	Carbon Steel, Stainless Steel or Aluminium
Seals	Klingrit, Nitrile, Viton, PTFE
Pallet	Stainless Steel AISI 304/316
Springs	Stainless Steel
Paint Finish	1. Customer Specification 2. Powder Coating, Colour RAL 9006 3. Epoxy Paint, Colour RAL 9006 4. PTFE Coating
ATEX Cert	Ex II 1/2 G c II B

Setting Range

Pressure Weight-loaded +3.5 mbar and +35 mbar. (+1,4 inch W.C and +14 inch W.C)

*Different settings can be applicable as per request.

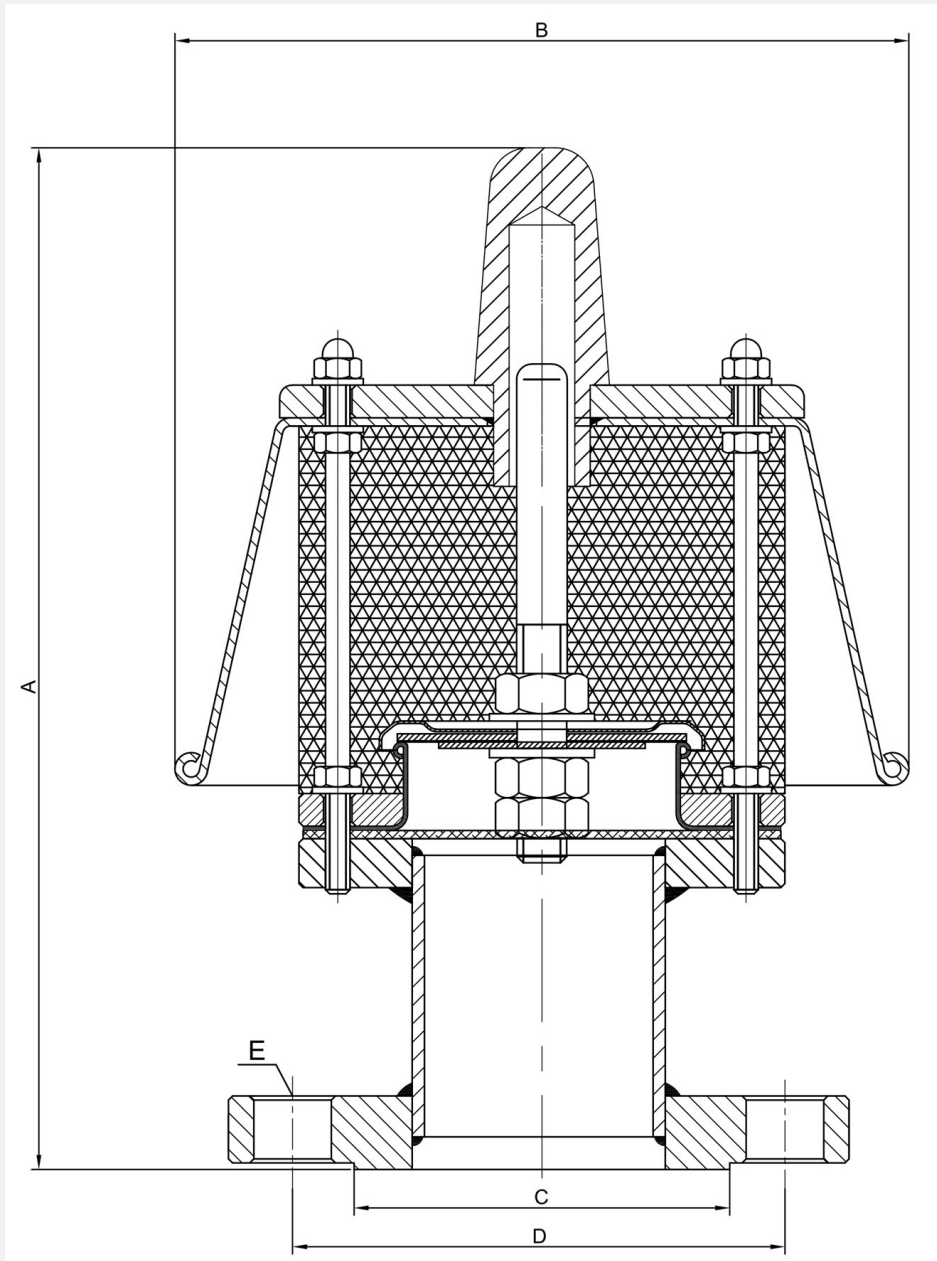


Key Features

- Easy to install. Do not need a special tool or experience.
- Transferring vapour content to collection system or condensation units.
- Prevent certain fire hazards.
- Light weight construction.
- Quick and easy to install, inspect and clean.
- Any grade materials are available.
- Has stainless steel pallets.
- Special designs can be achievable upon request to meet individual specifications.
- Eliminate the intake of air content (if needed) and the escape of vapors.
- Internal materials are resistant to winter conditions.
- Vacuum and relief cases can be managed effectively as per the set requirements of bulk storage tank.

- Super Duo technology provides extra curves and perfect seating with zero leakage.
- Set values can be arranged as per the site conditions, no need supervising.
- Design, manufacturing and test according to EN ISO 80079-36.
- PTFE, XYLAN, Rubber lining, etc. coating options are available.
- ANSI, DIN, JIS, API, etc. any special end connections are available.
- Breathing requirements are fulfilled according to API 2000 7th Edition.
- Diaphragm is manufactured from PTFE material to prevent possibility of ice formation and sticky residues hindering the valve from opening, while the pallet assembly moves freely on guide posts.

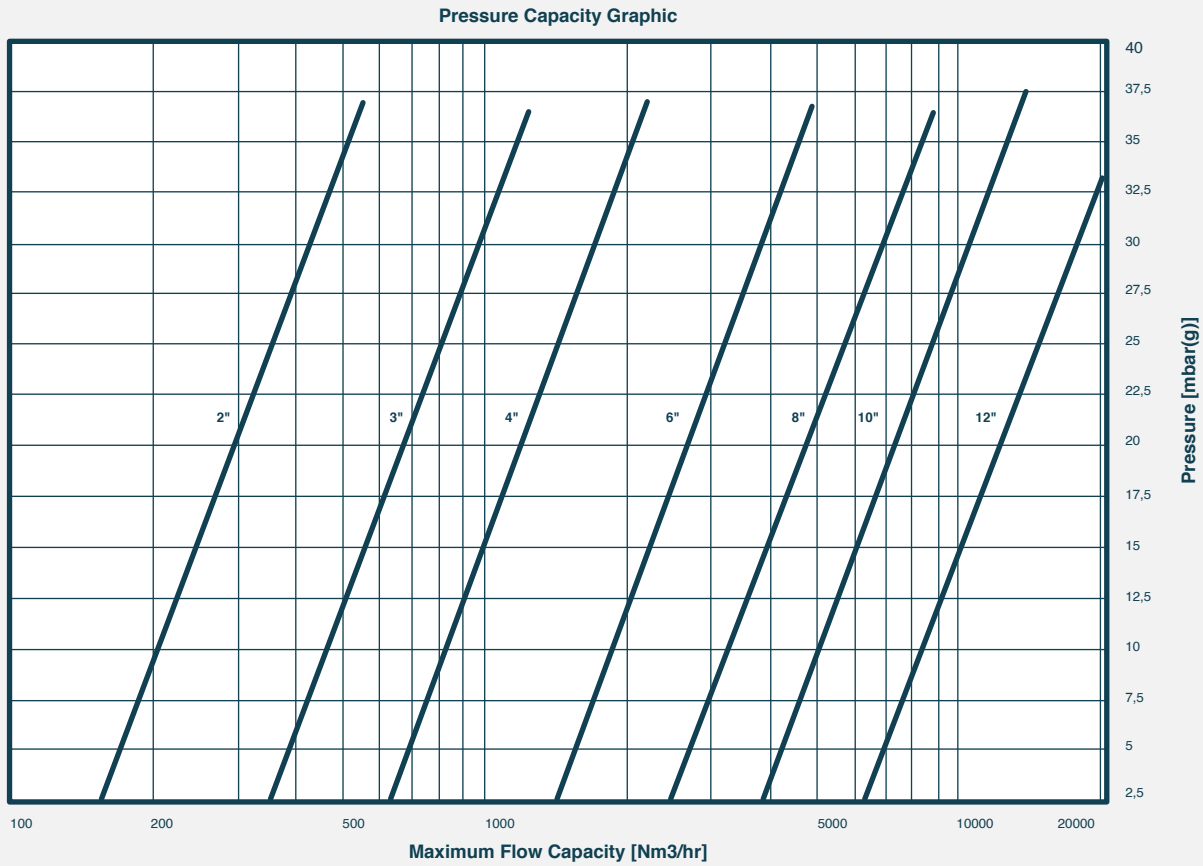
Technical Drawing



Weight & Dimensions

SIZE		A	B	C		D		E		TOTAL WEIGHT (kg)
NPS	DN			ANSI 150# RF	DN	ANSI 150# RF	DN	ANSI 150# RF	DN	
2"	50	248	165	Ø92.1	Ø102	Ø120.6	Ø125	Ø19x4	Ø18x4	7,5
3"	80	270	200	Ø127	Ø138	Ø152.4	Ø160	Ø19x4	Ø18x8	9,5
4"	100	327	285	Ø157.2	Ø158	Ø190.5	Ø180	Ø19x8	Ø18x8	13
6"	150	337	370	Ø215.9	Ø212	Ø241.3	Ø240	Ø22.2x8	Ø22x8	16
8"	200	339	455	Ø269.9	Ø268	Ø298.4	Ø295	Ø22.2x12	Ø22x12	23
10"	250	430	555	Ø323.8	Ø320	Ø362	Ø355	Ø25.4x12	Ø26x12	32
12"	300	405	613	Ø381	Ø378	Ø431.8	Ø410	Ø25.4x12	Ø26x12	45

Flow Capacity Tables



PRESSURE RELIEF CAPACITIES [Nm³/hr] - OVERPRESSURE WEIGHTED

mbar (g)	2"		3"		4"		6"		8"		10"		12"	
	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%
2,5	150	163	339	367	603	653	1356	1468	2413	2613	3777	4089	5439	5888
5	213	230	480	519	853	924	1917	2076	3414	3696	5342	5783	7691	8326
7,5	275	297	620	671	1104	1195	2479	2683	4415	4779	6907	7478	9943	10764
10	302	327	679	735	1207	1306	2711	2935	4827	5225	7554	8177	10876	11774
12,5	329	356	738	799	1309	1417	2943	3186	5239	5671	8200	8877	11809	12784
15	356	386	797	863	1412	1528	3175	3437	5651	6117	8846	9577	13309	14408
17,5	384	415	856	926	1514	1639	3407	3689	6063	6563	9493	10277	14502	15700
20	426	461	960	1040	1706	1847	3812	4126	6823	7387	10678	11559	15374	16644
22,5	469	507	1065	1153	1898	2054	4216	4564	7584	8210	11862	12842	15940	17256
25	476	516	1070	1159	1906	2064	4285	4639	7628	8258	11936	12921	17178	18597
27,5	484	524	1076	1165	1915	2073	4353	4713	7671	8305	12009	13000	18417	19937
30	522	565	1176	1273	2088	2261	4692	5080	8355	9045	12201	13209	18824	20379

Pressure Relief Valve

End-of-line, spring loaded

Model 143



Product Description

Storagetech™ 's Model 143 End of Line, Spring Loaded Pressure Relief Valve is designed to protect the tank from excessive internal pressure during operation.

The spring-loaded pallet and diaphragm assembly is held tightly against a seal to prevent the loss of vapour to atmosphere in the closed position.

As the internal pressure in the tank increases, due to product filling or vapour development, the set pressure is reached, accordingly, the diaphragm shall be opened and discharge the gas to atmosphere.

The opening set-point is selectable from a range between +35 mbar and +1000 mbar. (+14 inch and +400 inch W.C.).

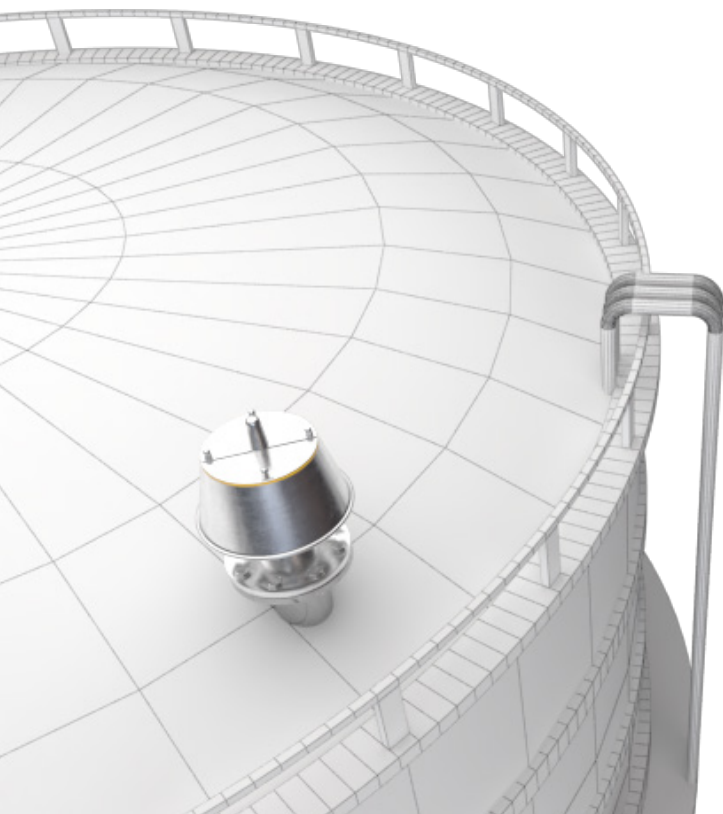
When the tank come into normal operation range, the valve shall be seated again.

Storagetech Valves Activated as close as to set pressures, less than 10% of set pressures, ensuring accurate pressure management and isolate emission losses perfectly.



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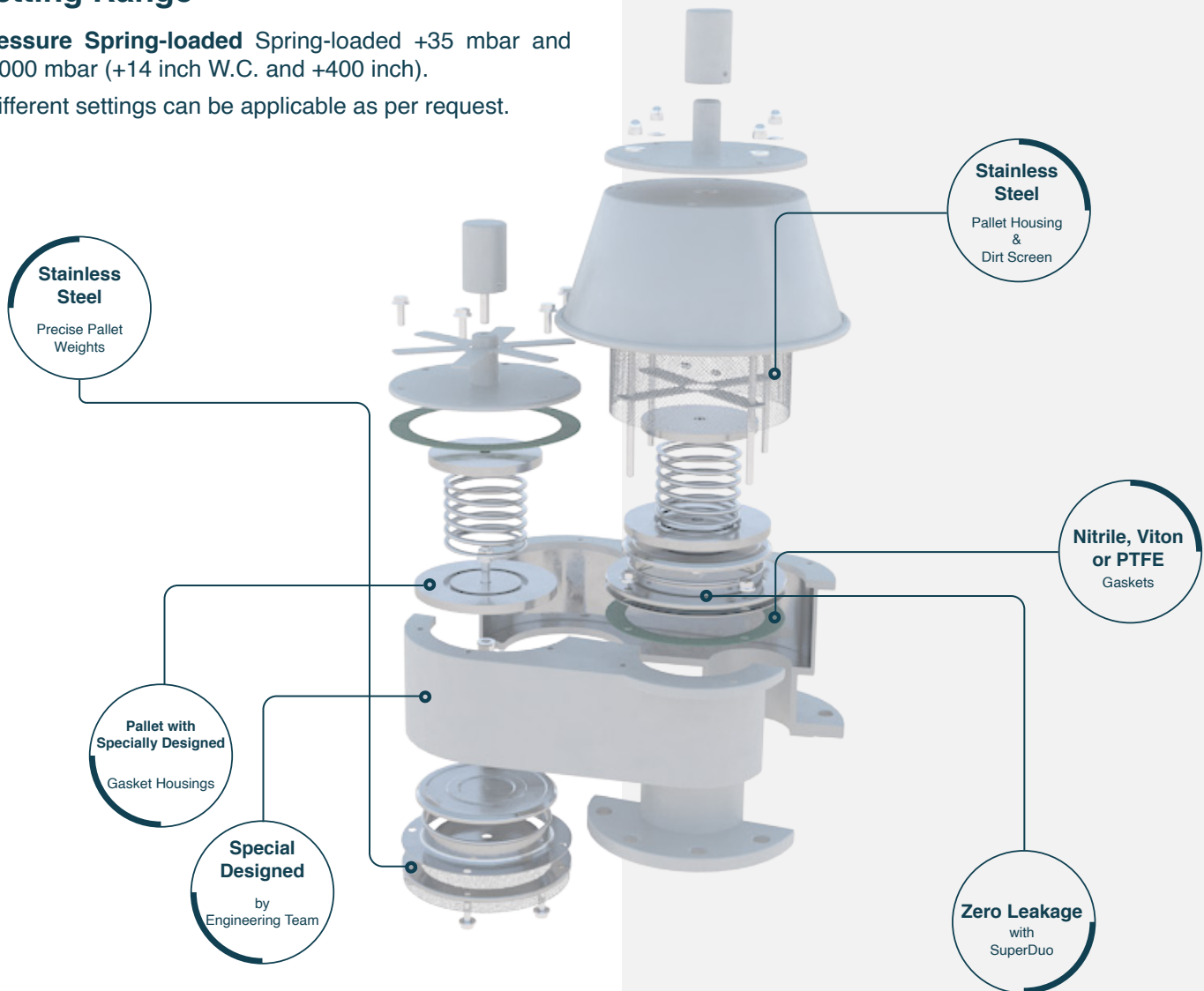


Standard Sizes	2" to 12" (DN50 to DN300) Further sizes are applicable upon request.
Flanges	ANSI, DIN, JIS, BSP
Body	Carbon Steel, Stainless Steel or Aluminium
Seals	Klingrit, Nitrile, Viton, PTFE
Pallet	Stainless Steel AISI 304/316
Springs	Stainless Steel
Paint Finish	1. Customer Specification 2. Powder Coating, Colour RAL 9006 3. Epoxy Paint, Colour RAL 9006 4. PTFE Coating
ATEX Cert	Ex II 1/2 G c II B

Setting Range

Pressure Spring-loaded Spring-loaded +35 mbar and +1000 mbar (+14 inch W.C. and +400 inch).

*Different settings can be applicable as per request.

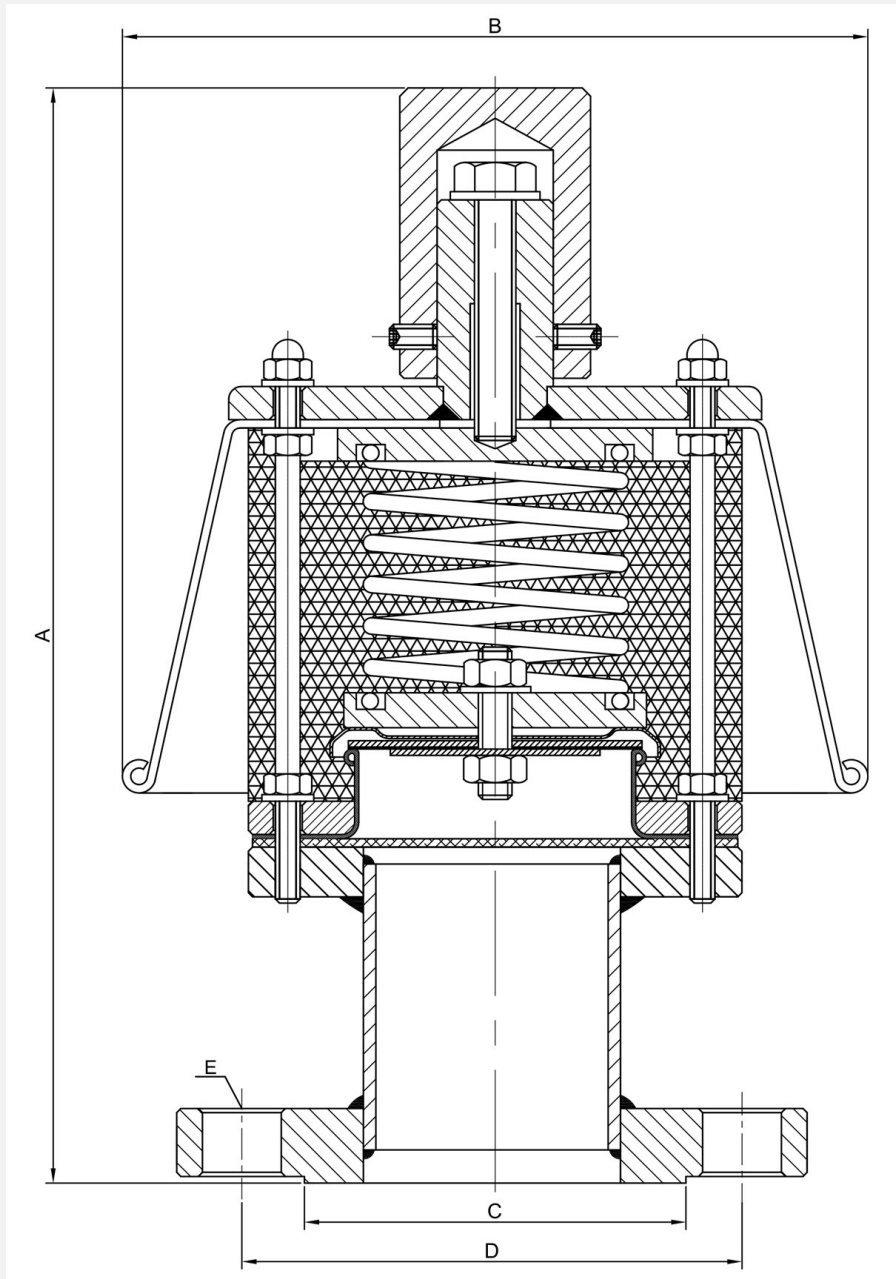


Key Features

- Easy to install. Do not need a special tool or experience.
- Transferring vapour content to collection system or condensation units.
- Prevent certain fire hazards.
- Light weight construction.
- Quick and easy to install, inspect and clean.
- Any grade materials are available.
- Has stainless steel pallets.
- Special designs can be achievable upon request to meet individual specifications.
- Eliminate the intake of air content (if needed) and the escape of vapors.
- Internal materials are resistant to winter conditions.
- Vacuum and relief cases can be managed effectively as per the set requirements of bulk storage tank.

- Super Duo technology provides extra curves and perfect seating with zero leakage.
- Set values can be arranged as per the site conditions, no need supervising.
- Design, manufacturing and test according to EN ISO 80079-36.
- PTFE, XYLAN, Rubber lining, etc. coating options are available.
- ANSI, DIN, JIS, API, etc. any special end connections are available.
- Breathing requirements are fulfilled according to API 2000 7th Edition.
- Diaphragm is manufactured from PTFE material to prevent possibility of ice formation and sticky residues hindering the valve from opening, while the pallet assembly moves freely on guide posts.

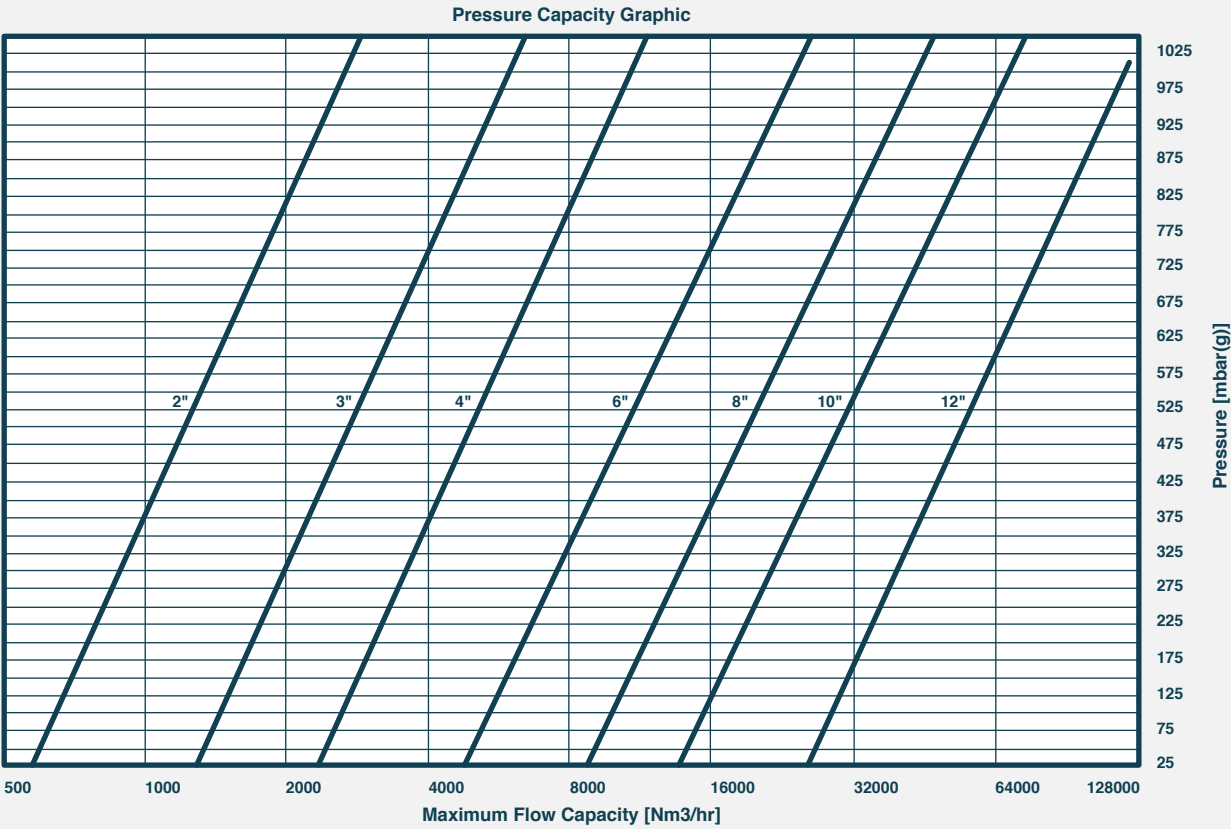
Technical Drawing



Weight & Dimensions

SIZE		A	B	C		D		E		TOTAL WEIGHT (kg)
NPS	DN			ANSI 150# RF	DN	ANSI 150# RF	DN	ANSI 150# RF	DN	
2"	50	285	165	Ø92.1	Ø102	Ø120.6	Ø125	Ø19x4	Ø18x4	8
3"	80	306	200	Ø127	Ø138	Ø152.4	Ø160	Ø19x4	Ø18x8	10
4"	100	364	285	Ø157.2	Ø158	Ø190.5	Ø180	Ø19x8	Ø18x8	14
6"	150	357	370	Ø215.9	Ø212	Ø241.3	Ø240	Ø22.2x8	Ø22x8	18
8"	200	354	455	Ø269.9	Ø268	Ø298.4	Ø295	Ø22.2x12	Ø22x12	25
10"	250	437	555	Ø323.8	Ø320	Ø362	Ø355	Ø25.4x12	Ø26x12	35
12"	300	407	613	Ø381	Ø378	Ø431.8	Ø410	Ø25.4x12	Ø26x12	50

Flow Capacity Tables



Flow Capacity Tables

PRESSURE RELIEF CAPACITIES [Nm³/hr] - OVERPRESSURE SPRING

mbar (g)	2"		3"		4"		6"		8"		10"		12"	
	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%
40	569	585	1282	1320	2277	2344	5090	5239	9111	9377	14260	14676	20533	21131
50	637	655	1434	1476	2546	2620	5721	5887	10185	10481	15936	16400	22948	23617
60	697	718	1569	1614	2788	2869	6264	6447	11153	11478	17453	17962	25130	25862
70	752	774	1694	1744	3011	3098	6764	6961	12043	12394	18845	19394	27133	27924
80	804	828	1811	1863	3217	3310	7229	7439	12869	13244	20139	20725	28997	29841
90	854	879	1921	1977	3411	3511	7665	7889	13645	14043	21352	21974	30744	31640
100	899	925	2024	2083	3595	3699	8075	8310	14379	14798	22500	23156	32397	33340
120	985	1013	2216	2280	3935	4049	8842	9099	15739	16198	24627	25345	35463	36496
140	1062	1093	2391	2460	4246	4369	9543	9821	16989	17484	26584	27359	38278	39393
160	1135	1168	2554	2629	4537	4669	10195	10492	18149	18677	28397	29224	40891	42082
180	1203	1238	2708	2787	4809	4949	10805	11119	19236	19797	30097	30973	43342	44605
200	1267	1304	2852	2935	5065	5212	11382	11713	20262	20852	31709	32632	45650	46979
240	1386	1427	3120	3211	5541	5703	12451	12813	22166	22811	34680	35690	49940	51394
280	1496	1539	3365	3463	5977	6151	13430	13821	23908	24605	37410	38499	53868	55437
300	1547	1592	3481	3583	6182	6362	13892	14296	24730	25451	38697	39824	55702	57325
350	1668	1716	3750	3859	6665	6859	14978	15415	26665	27441	41727	42943	60080	61830
400	1780	1832	4006	4122	7114	7321	15986	16451	28457	29286	44527	45824	64118	65985
450	1885	1940	4242	4365	7532	7752	16926	17419	30225	31106	47151	48525	67891	69869
500	1983	2041	4463	4593	7927	8158	17812	18331	31709	32632	49617	51062	71441	73522
550	2076	2137	4673	4809	8300	8541	18648	19191	33201	34168	51953	53466	74805	76984
600	2165	2228	4873	5015	8654	8906	19446	20013	34618	35627	54168	55745	77998	80270
650	2251	2316	5063	5211	8993	9255	20207	20795	35973	37021	56290	57929	81050	83410
700	2331	2399	5246	5399	9316	9588	20935	21545	37265	38351	58319	60017	83976	86422
750	2409	2479	5422	5580	9628	9909	21636	22266	38517	39639	60265	62021	86762	89289
800	2483	2556	5591	5754	9929	10218	22310	22960	39717	40874	62149	63959	89484	92091
850	2554	2629	5754	5921	10218	10515	22959	23627	40870	42061	63958	65821	92091	94774
900	2627	2703	5911	6083	10498	10804	23588	24275	41993	43216	65710	67624	94611	97366
950	2694	2773	6064	6240	10769	11082	24197	24902	43076	44330	67405	69369	97051	99877
1000	2762	2843	6216	6397	11036	11358	24800	25523	44149	45435	69099	71111	99467	102364

Monitor TRAILERS



Certificates & Standards



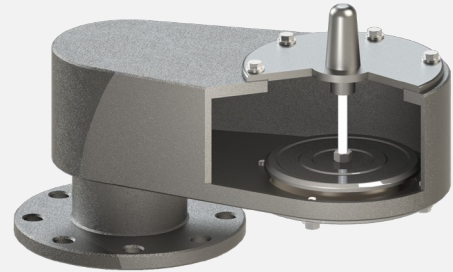
Vacuum Relief Valve

End-of-line, weight loaded
Model 190



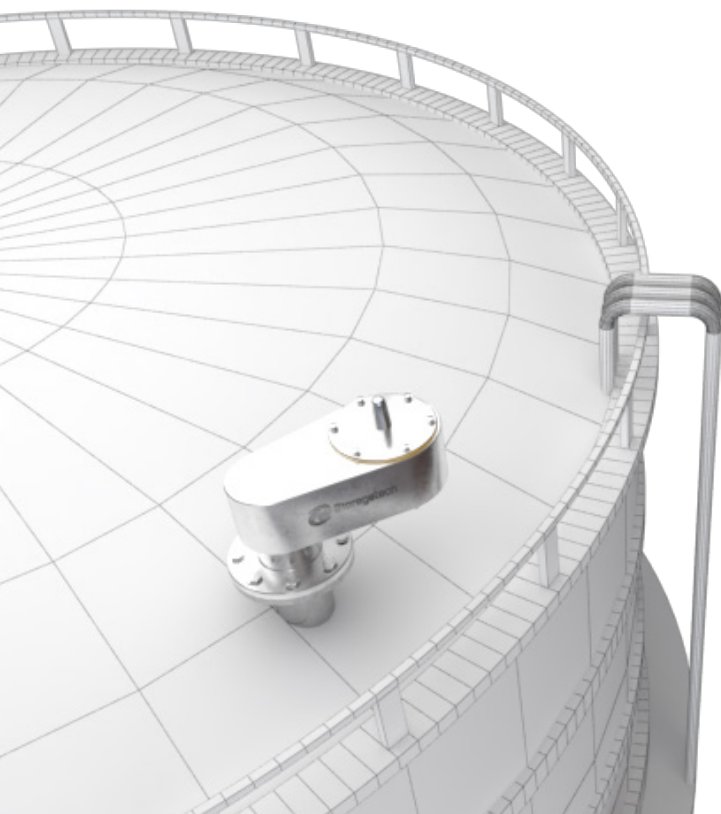
Product Description

Storagetech™ 's Model 190 Vacuum Relief Valve is designed to protect the tank from excessive under pressure during operation. The weighted-loaded pallet and diaphragm assembly is held tightly against a seal to prevent the loss of vapour to atmosphere in the closed position. As the internal pressure in the tank decreases, due to emptying or vacuum conditions occurs, the balance between the tank pressure and the external atmospheric pressure changes, accordingly when the set pressure of the unit is reached, the diaphragm opens to vacuum air content and rebalance the internal pressure. Model 190 set vacuum can be arranged as per storage tank requirements and the valve will reseal when internal pressure returns to below set pressure. The vent will close when the tank returns to a positive pressure. A mesh filter screen over the air inlet port prevents the ingress of atmospheric pollution. Storagetech Valves Activated as close as to set pressures, less than 10% of set pressures, ensuring accurate pressure management and isolate emission losses perfectly .



With 40 years of experience, Storagetech™ PVV systems offer effective solutions against unwanted evaporation and vacuums that may occur in tanks.

Thanks to PVV solutions produced completely in accordance with international norms, Storagetech™ is a reliable, sustainable and effective solution partner for your investments.

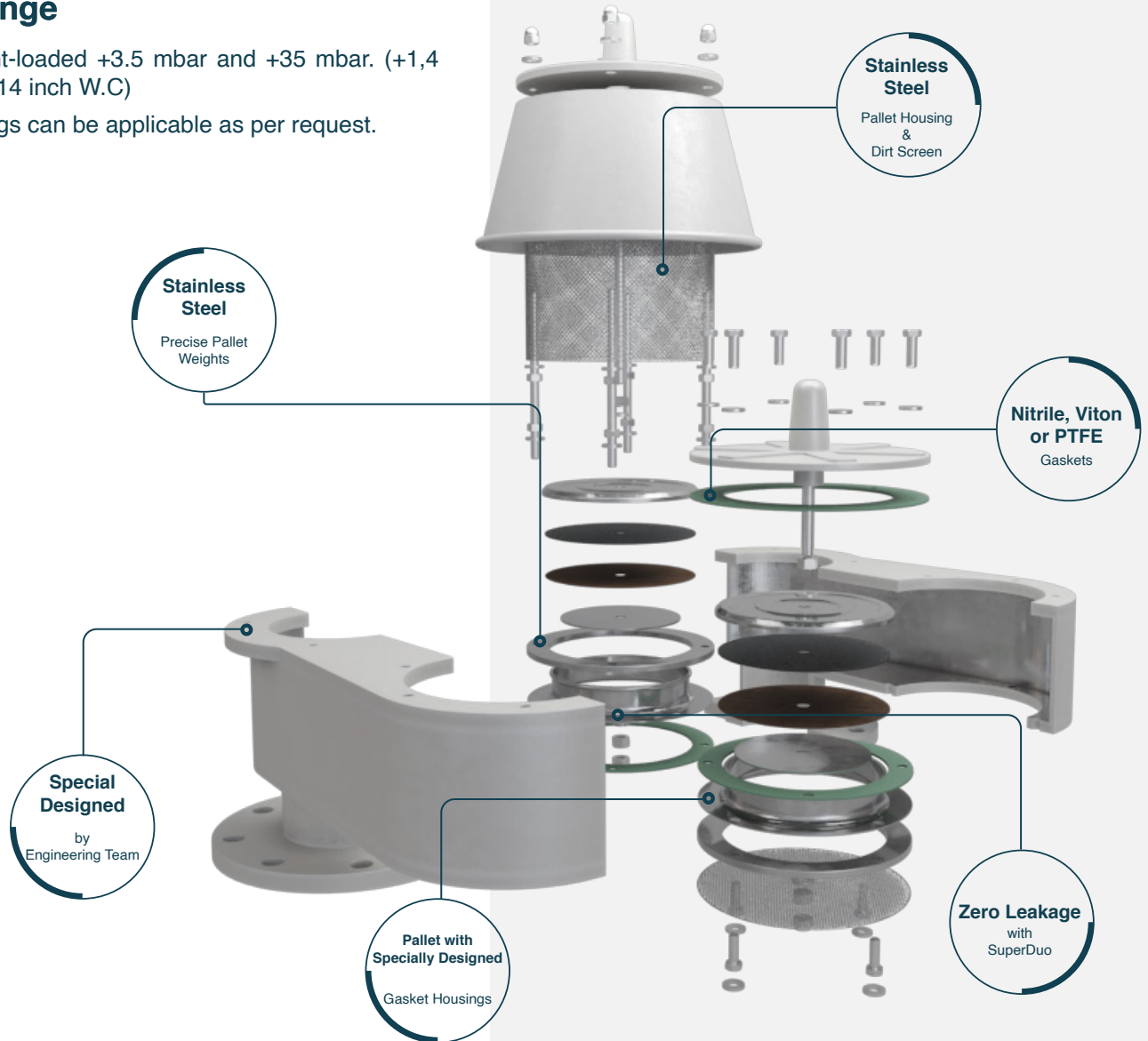


Standard Sizes	2" to 12" (DN50 to DN300) Further sizes are applicable upon request.
Flanges	ANSI, DIN, JIS, BSP
Body	Carbon Steel, Stainless Steel or Aluminium
Seals	Klingrit, Nitrile, Viton, PTFE
Pallet	Stainless Steel AISI 304/316
Springs	Stainless Steel
Paint Finish	1.Customer Specification 2.Powder Coating, Colour RAL 9006 3.Epoxy Paint, Colour RAL 9006 4. PTFE Coating
ATEX Cert	Ex II 1/2 G c II B

Setting Range

Vacuum Weight-loaded +3.5 mbar and +35 mbar. (+1,4 inch W.C and +14 inch W.C)

*Different settings can be applicable as per request.

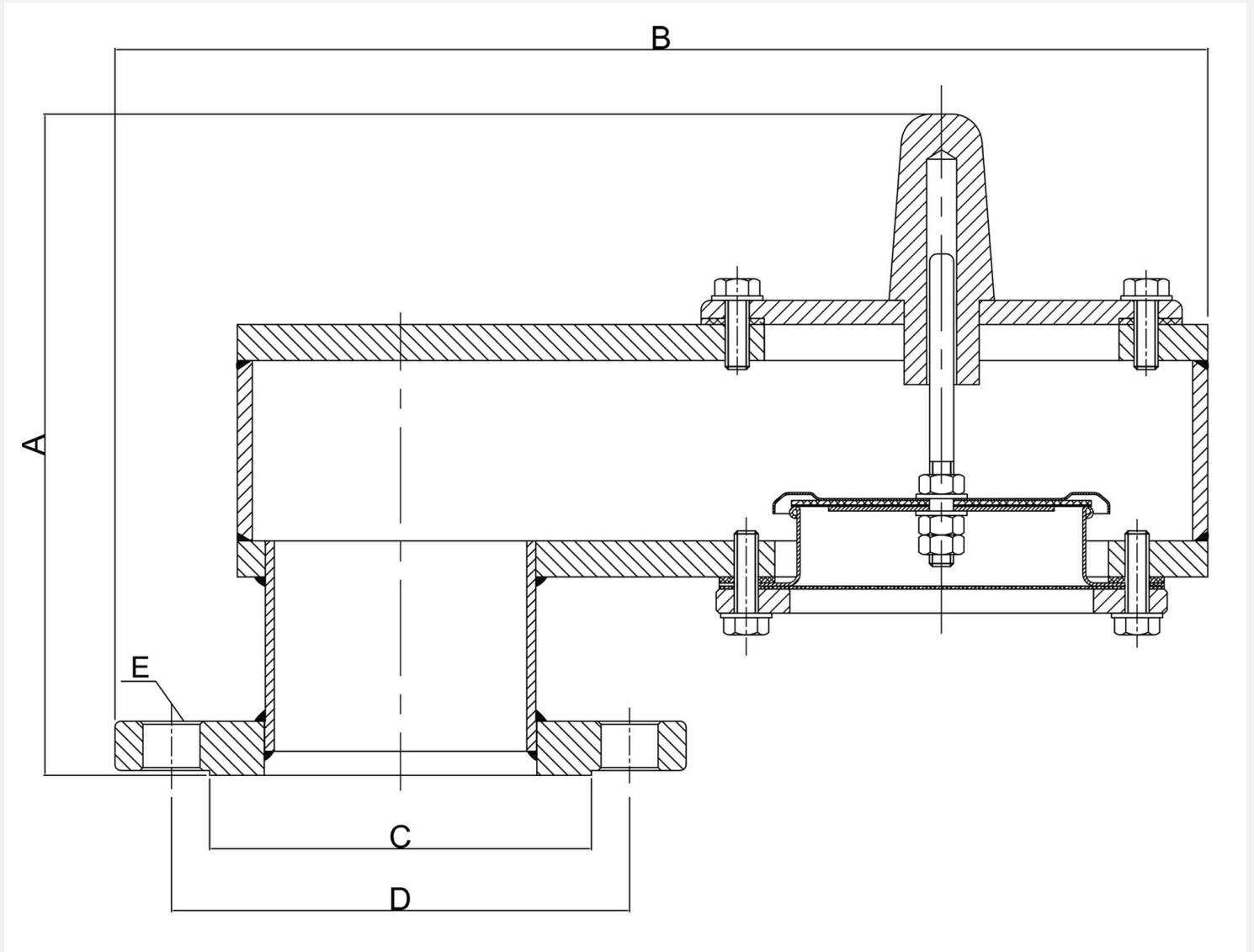


Key Features

- Easy to install. Do not need a special tool or experience.
- Transferring vapour content to collection system or condensation units.
- Prevent certain fire hazards.
- Light weight construction.
- Quick and easy to install, inspect and clean.
- Any grade materials are available.
- Has stainless steel pallets.
- Special designs can be achieved upon request to meet individual specifications.
- Eliminate the intake of air content (if needed) and the escape of vapors.
- Internal materials are resistant to winter conditions.
- Vacuum and relief cases can be managed effectively as per the set requirements of bulk storage tank.

- Super Duo technology provides extra curves and perfect seating with zero leakage.
- Set values can be arranged as per the site conditions, no need supervising.
- Design, manufacturing and test according to EN ISO 80079-36.
- PTFE, XYLAN, Rubber lining, etc. coating options are available.
- ANSI, DIN, JIS, API, etc. any special end connections are available.
- Breathing requirements are fulfilled according to API 2000 7th Edition.
- Diaphragm is manufactured from PTFE material to prevent possibility of ice formation and sticky residues hindering the valve from opening, while the pallet assembly moves freely on guide posts.

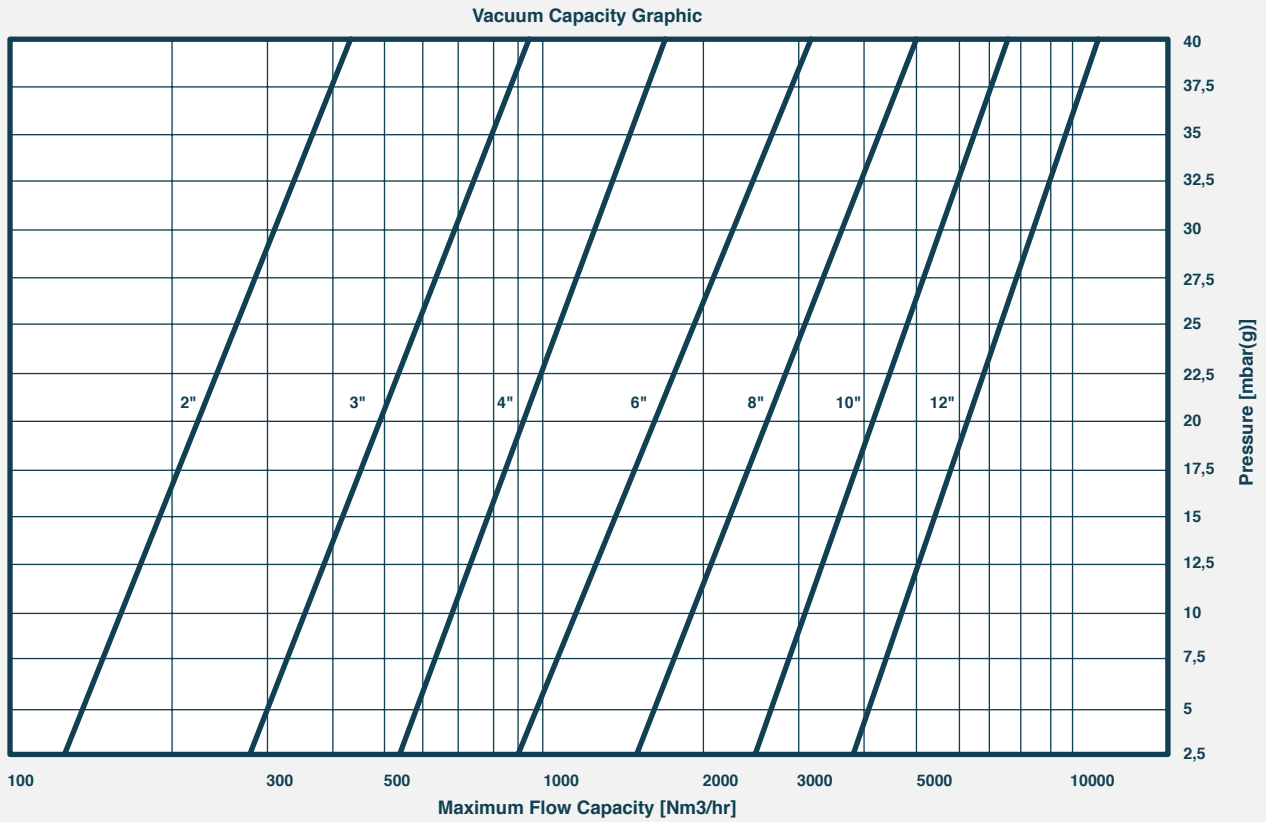
Technical Drawing



Weight & Dimensions

SIZE		A	B	C		D		E		TOTAL WEIGHT (kg)
NPS	DN			ANSI 150# RF	DN	ANSI 150# RF	DN	ANSI 150# RF	DN	
2"	50	200	271	Ø92.1	Ø102	Ø120.6	Ø125	Ø19x4	Ø18x4	8
3"	80	219	349	Ø127	Ø138	Ø152.4	Ø160	Ø19x4	Ø18x8	14
4"	100	280	446	Ø157.2	Ø158	Ø190.5	Ø180	Ø19x8	Ø18x8	21
6"	150	282	616	Ø215.9	Ø212	Ø241.3	Ø240	Ø22.2x8	Ø22x8	29
8"	200	329	751	Ø269.9	Ø268	Ø298.4	Ø295	Ø22.2x12	Ø22x12	55
10"	250	405	871	Ø323.8	Ø320	Ø362	Ø355	Ø25.4x12	Ø26x12	73
12"	300	441	997	Ø381	Ø378	Ø431.8	Ø410	Ø25.4x12	Ø26x12	107

Flow Capacity Tables



VACUUM RELIEF CAPACITIES [Nm³/hr] - UNDERPRESSURE WEIGHTED

mbar	2"		3"		4"		6"		8"		10"		12"	
	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%
2,5	119	127	268	285	567	604	963	1026	1549	1651	2739	2918	3906	4161
5	182	194	347	369	653	695	1363	1452	2145	2286	3324	3542	4780	5092
7,5	245	261	426	454	706	752	1772	1888	2628	2800	3561	3794	5313	5660
10	254	270	505	538	777	828	2127	2266	3042	3241	3888	4143	5284	6024
12,5	262	279	550	586	936	998	2339	2492	3301	3517	4216	4492	5995	6387
15	286	304	593	632	1017	1083	2526	2692	3638	3876	4452	4744	6101	6955
17,5	309	329	658	701	1140	1214	2678	2853	4004	4266	4888	5208	7061	7523
20	361	384	708	755	1279	1363	2785	2967	4296	4577	5580	5945	7735	8818
22,5	412	439	768	819	1317	1403	2869	3056	4588	4888	6272	6683	9492	10113
25	398	424	817	871	1344	1431	2926	3117	4811	5125	6708	7147	9369	10681
27,5	384	409	861	918	1396	1488	2984	3180	5042	5372	7143	7611	10558	11248
30	439	467	910	969	1772	1888	3044	3243	5312	5659	7703	8207	11338	12080

Vacuum Relief Valve

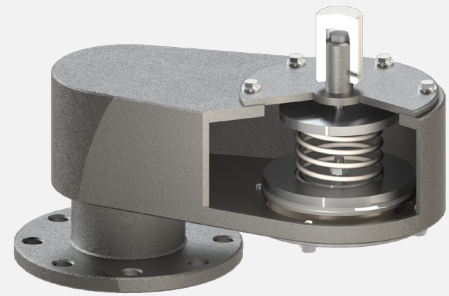
End-of-line, spring loaded

Model 193



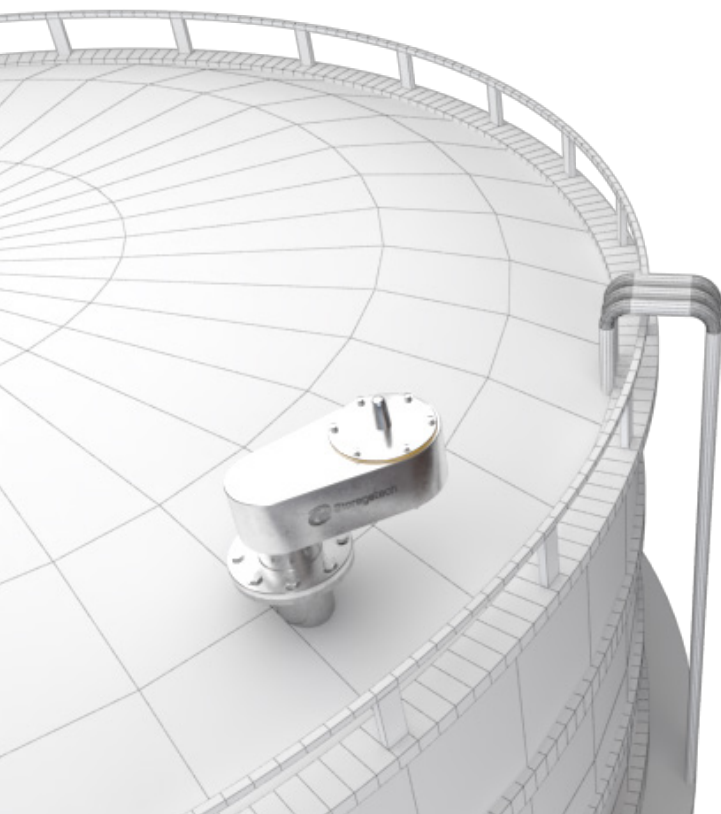
Product Description

Storagetech™ 's Model 193 Vacuum Relief Valve is designed to protect the tank from excessive under pressurisation during operation. The spring-loaded pallet and diaphragm assembly is held tightly against a seal to prevent the loss of vapour to atmosphere in the closed position. As the internal pressure in the tank decreases, due to product emptying or vacuum development, the set pressure is reached, accordingly, the diaphragm shall be opened and charge the gas into the tank. Model 190 set vacuum can be arranged as per storage tank requirements and the valve will reseal when internal pressure returns to above set pressure. Storagetech Valves Activated as close as to set pressures, less than 10% of set pressures, ensuring accurate pressure management and isolate emission losses perfectly.



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Thanks to PVV solutions produced completely in accordance with international norms, Storagetech™ is a reliable, sustainable and effective solution partner for your investments.



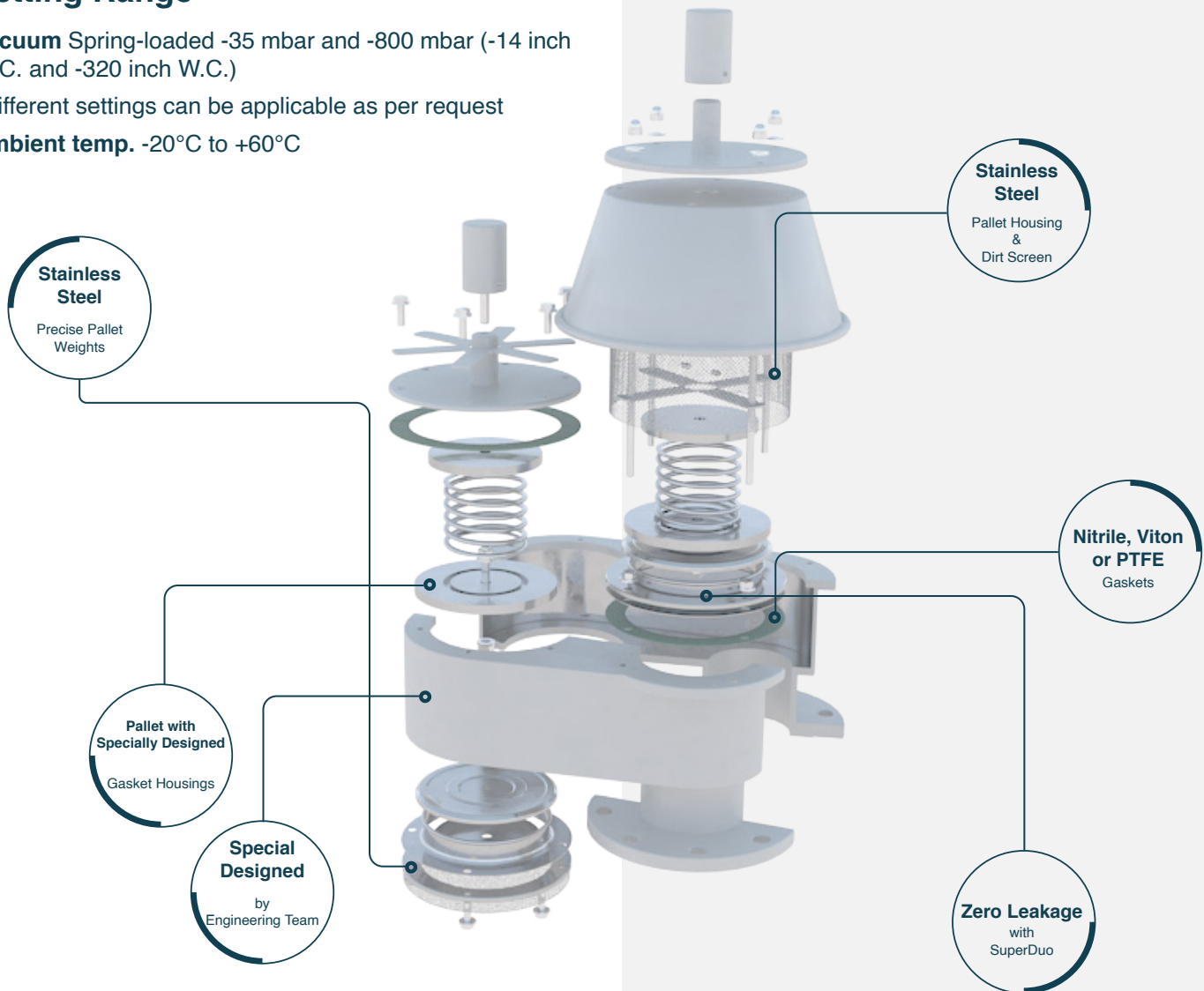
Standard Sizes	2" to 12" (DN50 to DN300) Further sizes are applicable upon request.
Flanges	ANSI, DIN, JIS, BSP
Body	Carbon Steel, Stainless Steel or Aluminium
Seals	Klingrit, Nitrile, Viton, PTFE
Pallet	Stainless Steel AISI 304/316
Springs	Stainless Steel
Paint Finish	1. Customer Specification 2. Powder Coating, Colour RAL 9006 3. Epoxy Paint, Colour RAL 9006 4. PTFE Coating
ATEX Cert	Ex II 1/2 G c II B

Setting Range

Vacuum Spring-loaded -35 mbar and -800 mbar (-14 inch W.C. and -320 inch W.C.)

*Different settings can be applicable as per request

Ambient temp. -20°C to +60°C

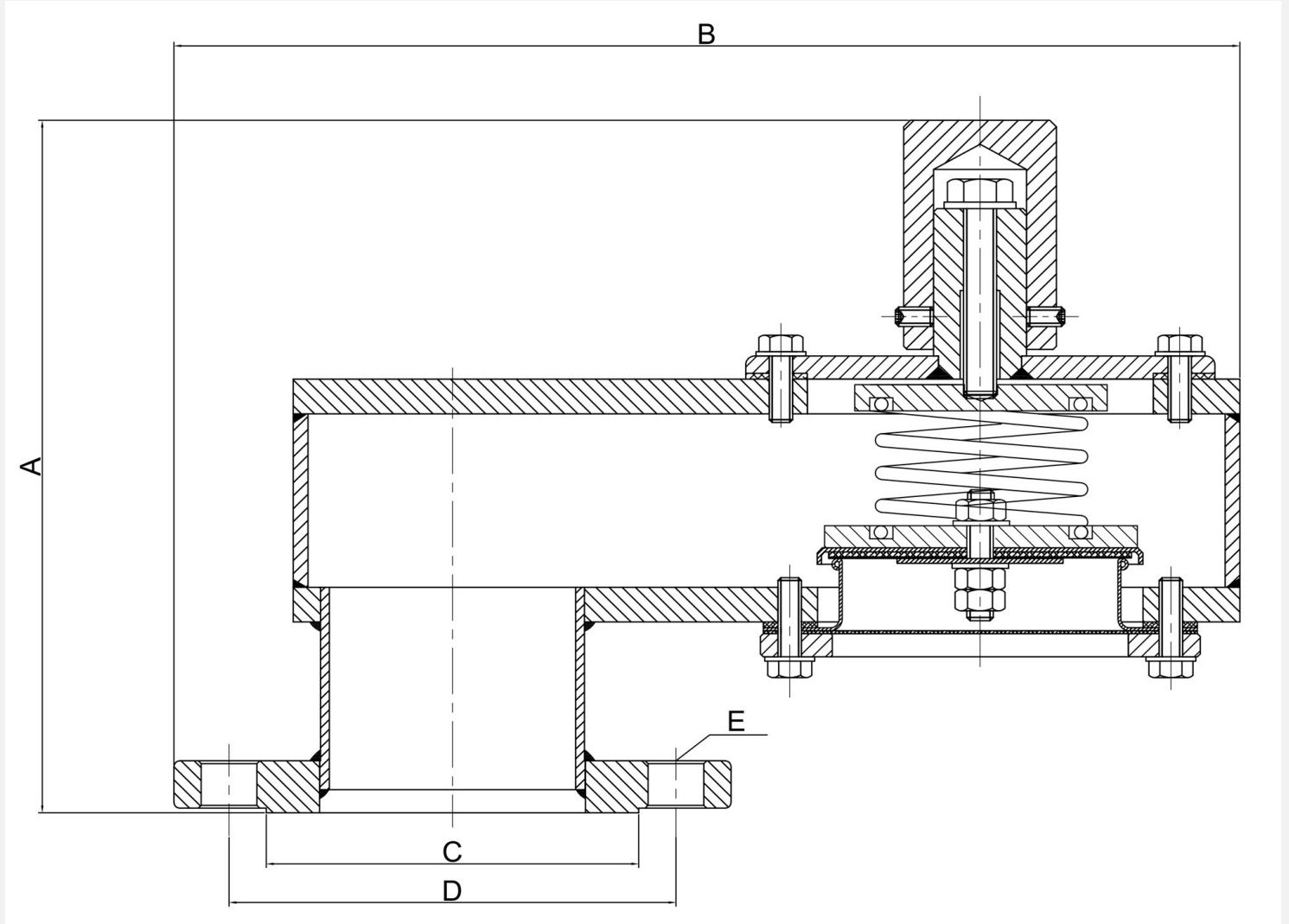


Key Features

- Easy to install. Do not need a special tool or experience.
- Transferring vapour content to collection system or condensation units.
- Prevent certain fire hazards.
- Light weight construction.
- Quick and easy to install, inspect and clean.
- Any grade materials are available.
- Has stainless steel pallets.
- Special designs can be achievable upon request to meet individual specifications.
- Eliminate the intake of air content (if needed) and the escape of vapors.
- Internal materials are resistant to winter conditions.
- Vacuum and relief cases can be managed effectively as per the set requirements of bulk storage tank.

- Super Duo technology provides extra curves and perfect seating with zero leakage.
- Set values can be arranged as per the site conditions, no need supervising.
- Design, manufacturing and test according to EN ISO 80079-36.
- PTFE, XYLAN, Rubber lining, etc. coating options are available.
- ANSI, DIN, JIS, API, etc. any special end connections are available.
- Breathing requirements are fulfilled according to API 2000 7th Edition.
- Diaphragm is manufactured from PTFE material to prevent possibility of ice formation and sticky residues hindering the valve from opening, while the pallet assembly moves freely on guide posts.

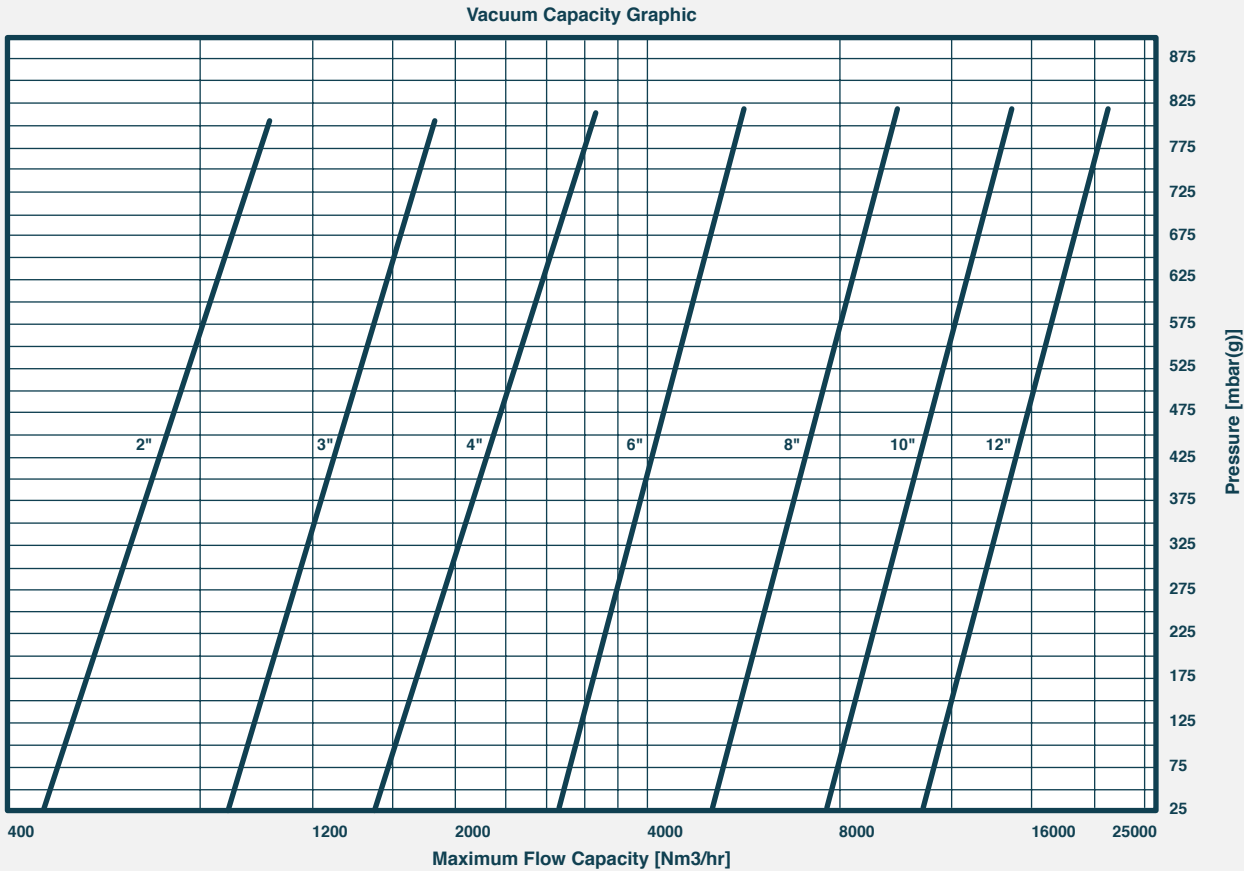
Technical Drawing



Weight & Dimensions

SIZE		A	B	C		D		E		TOTAL WEIGHT (kg)
NPS	DN			ANSI 150# RF	DN	ANSI 150# RF	DN	ANSI 150# RF	DN	
2"	50	200	271	Ø92.1	Ø102	Ø120.6	Ø125	Ø19x4	Ø18x4	9
3"	80	219	349	Ø127	Ø138	Ø152.4	Ø160	Ø19x4	Ø18x8	15
4"	100	280	446	Ø157.2	Ø158	Ø190.5	Ø180	Ø19x8	Ø18x8	23
6"	150	282	616	Ø215.9	Ø212	Ø241.3	Ø240	Ø22.2x8	Ø22x8	32
8"	200	329	751	Ø269.9	Ø268	Ø298.4	Ø295	Ø22.2x12	Ø22x12	57
10"	250	405	871	Ø323.8	Ø320	Ø362	Ø355	Ø25.4x12	Ø26x12	77
12"	300	441	997	Ø381	Ø378	Ø431.8	Ø410	Ø25.4x12	Ø26x12	110

Flow Capacity Tables



Flow Capacity Tables

VACUUM RELIEF CAPACITIES [Nm³/hr] - UNDERPRESSURE SPRING

mbar (g)	2"		3"		4"		6"		8"		10"		12"	
	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%
40	556	587	1031	1090	1813	1915	3138	3315	5475	5785	8260	8728	11686	12347
50	567	599	1052	1112	1849	1954	3200	3381	5584	5900	8425	8902	11920	12594
60	578	611	1073	1134	1886	1993	3264	3449	5696	6018	8594	9080	12158	12846
70	590	623	1095	1156	1924	2032	3330	3518	5810	6139	8766	9262	12401	13103
80	602	636	1116	1180	1962	2073	3396	3588	5926	6261	8941	9447	12649	13365
90	614	648	1139	1203	2001	2115	3464	3660	6045	6387	9120	9636	12902	13632
100	626	661	1162	1227	2041	2157	3533	3733	6165	6514	9302	9829	13160	13905
120	639	675	1185	1252	2082	2200	3604	3808	6289	6645	9488	10025	13423	14183
140	651	688	1208	1277	2124	2244	3676	3884	6415	6778	9678	10226	13692	14467
160	664	702	1233	1302	2166	2289	3750	3962	6543	6913	9872	10430	13966	14756
180	678	716	1257	1328	2210	2335	3825	4041	6674	7051	10069	10639	14245	15051
200	691	730	1282	1355	2254	2381	3901	4122	6807	7192	10270	10852	14530	15352
240	705	745	1308	1382	2299	2429	3979	4204	6943	7336	10476	11069	14820	15659
280	726	767	1347	1424	2368	2502	4099	4331	7152	7556	10790	11401	15265	16129
300	748	790	1388	1466	2439	2577	4222	4460	7366	7783	11114	11743	15723	16613
350	770	814	1429	1510	2512	2654	4348	4594	7587	8017	11447	12095	16195	17111
400	793	838	1472	1556	2587	2734	4479	4732	7815	8257	11791	12458	16681	17625
450	817	864	1516	1602	2665	2816	4613	4874	8049	8505	12144	12832	17181	18154
500	842	889	1562	1650	2745	2900	4751	5020	8291	8760	12509	13217	17696	18698
550	875	925	1624	1716	2855	3016	4941	5221	8622	9110	13009	13745	18404	19446
600	910	962	1689	1785	2969	3137	5139	5430	8967	9475	13529	14295	19140	20224
650	947	1000	1757	1856	3088	3262	5345	5647	9326	9854	14071	14867	19906	21033
700	985	1040	1827	1931	3211	3393	5558	5873	9699	10248	14633	15462	20702	21874
750	1024	1082	1900	2008	3340	3529	5781	6108	10087	10658	15219	16080	21530	22749
800	1065	1125	1976	2088	3473	3670	6012	6352	10490	11084	15828	16723	22392	23659

CO₂ Storage Tank VENT ABSORBER



YouTube



Certificates & Standards



Free Vent



Capped-type
Model 150

Product Description

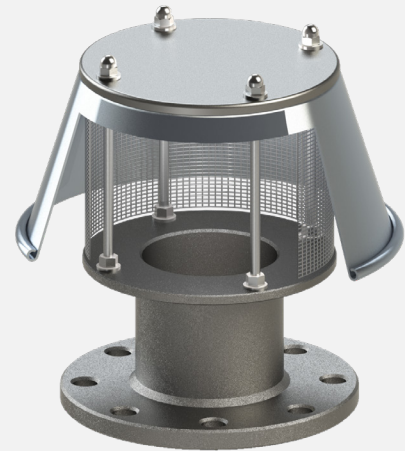
StorageTech™ 's Model 150 Capped Free Vent is installed in low-pressure atmospheric storage tanks to meet free breathing requirements to prevent build-up of internal pressure.

The vent should be installed on the tank roof flange should be located at the center of the storage tank.

It is supplied with weatherhood and stainless mesh-screen protection.

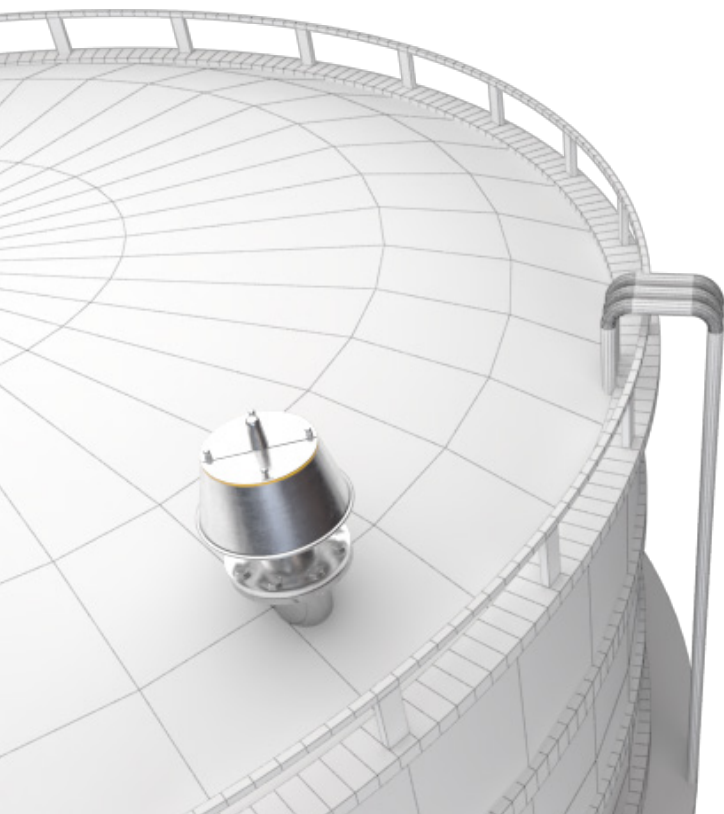
A cap and screen protects the vent and restricts effects, dust, wind, rain, or insects from entering degrading the product.

No routine maintenance is required to ensure continuous and effective operation.



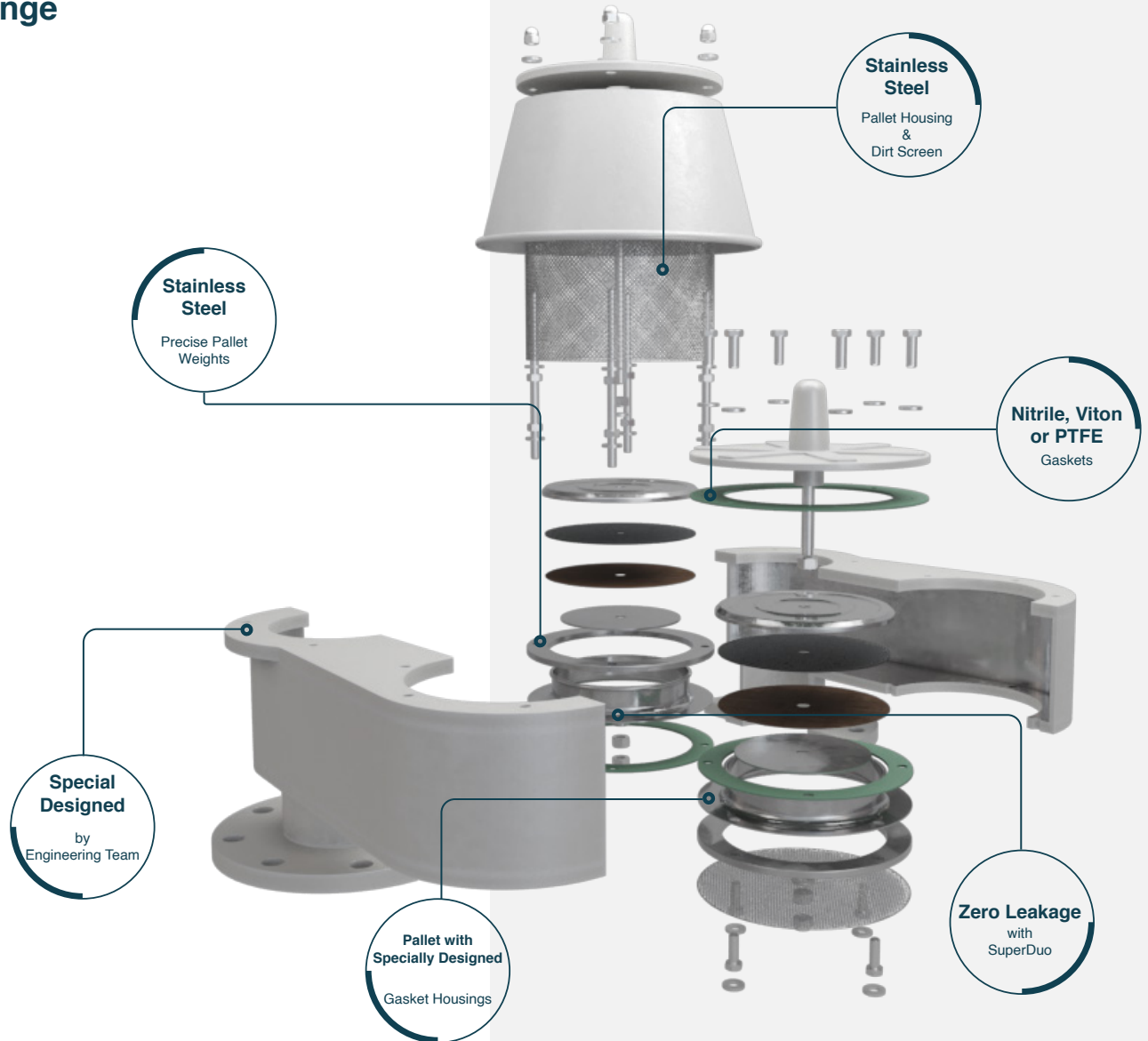
With 40 years of experience, StorageTech™ PVV systems offer effective solutions against unwanted evaporation and vacuums that may occur in tanks.

Thanks to PVV solutions produced completely in accordance with international norms, StorageTech™ is a reliable, sustainable and effective solution partner for your investments.



Standard Sizes	2" to 12" (DN50 to DN300) Further sizes are applicable upon request.
Flanges	ANSI, DIN, JIS, BSP
Body	Carbon Steel, Stainless Steel or Aluminium
Seals	Klingrit, Nitrile, Viton, PTFE
Pallet	Stainless Steel AISI 304/316
Springs	Stainless Steel
Paint Finish	1. Customer Specification 2. Powder Coating, Colour RAL 9006 3. Epoxy Paint, Colour RAL 9006 4. PTFE Coating
ATEX Cert	Ex II 1/2 G c II B

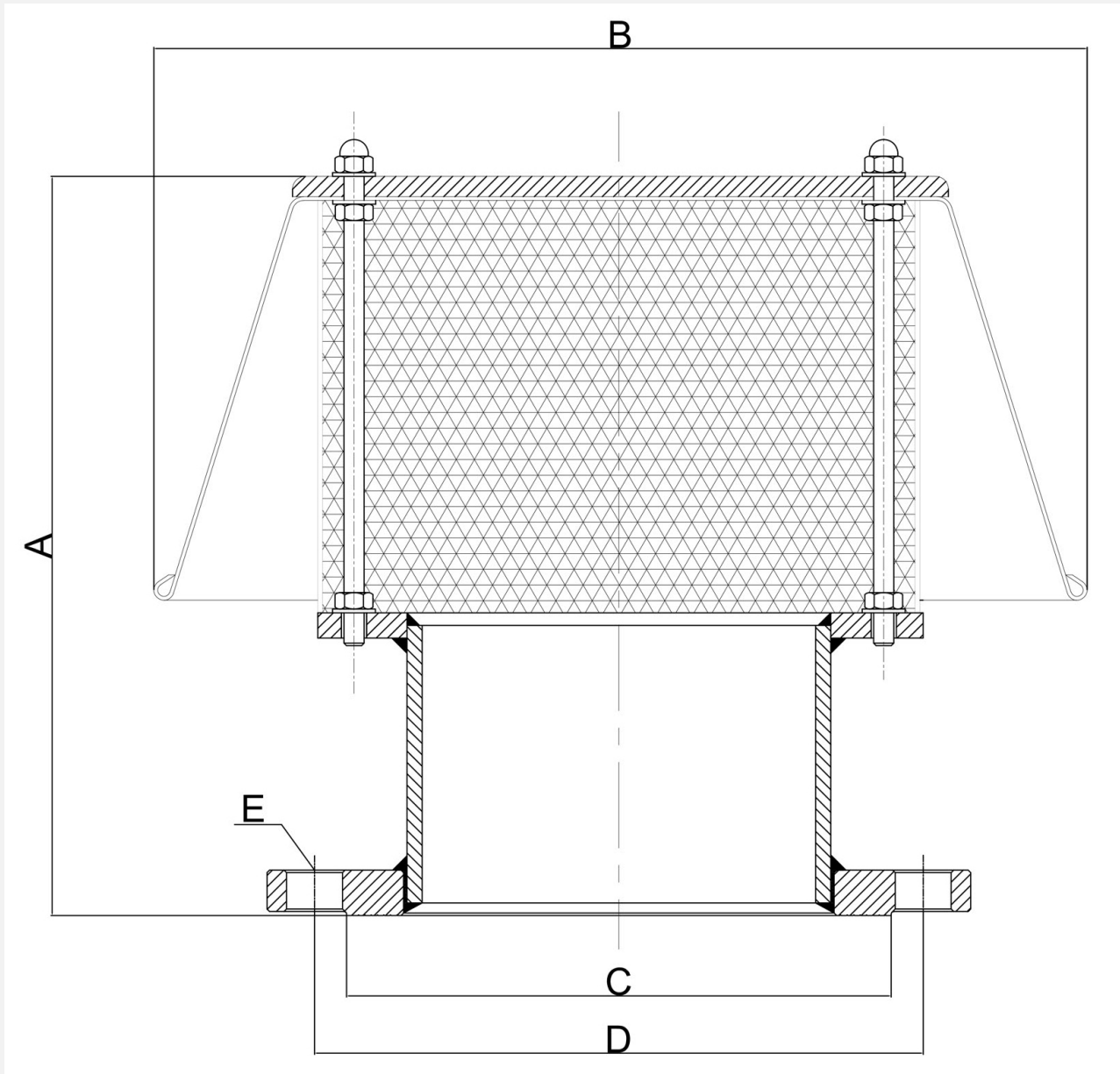
Setting Range



Key Features

- Easy to install. Do not need a special tool or experience.
- Light weight construction.
- Large weatherhood provides maximum airflow.
- No moving parts minimises cost of spare.
- Quick and easy to install, inspect and clean.
- Weatherhood and bird screen supplied as standard.
- Special designs can be achieved upon request to meet individual specifications.
- Any grade materials are available.
- PTFE, XYLAN, Rubber lining, etc. coating options are available.
- ANSI, DIN, JIS, API, etc. any special end connections are available.
- Breathing requirements are fulfilled according to API 2000 7th Edition.

Technical Drawing



Weight & Dimensions

SIZE		A	B	C		D		E		TOTAL WEIGHT (kg)
NPS	DN			ANSI 150# RF	DN	ANSI 150# RF	DN	ANSI 150# RF	DN	
2"	50	221,5	165	Ø92,1	Ø102	Ø120,6	Ø125	Ø19x4	Ø18x4	6,5
4"	100	290,5	285	Ø157,2	Ø158	Ø190,5	Ø180	Ø19x8	Ø18x8	12
6"	150	313,5	370	Ø215,9	Ø212	Ø241,3	Ø240	Ø22,2x8	Ø22x8	15
8"	200	305,5	455	Ø269,9	Ø268	Ø298,4	Ø295	Ø22,2x8	Ø22x12	22
10"	250	348	490	Ø323,8	Ø320	Ø362	Ø355	Ø25,4x12	Ø26x12	30
12"	300	350	613	Ø381	Ø378	Ø431,8	Ø410	Ø25,4x12	Ø26x12	43

Floating SUCTION UNIT



Certificates & Standards



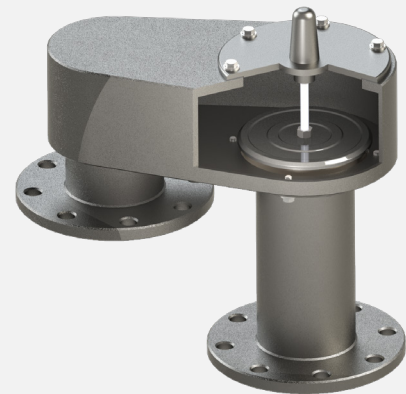
Vacuum Relief Valve

Top mounted, pipe-away, weight loaded
Model 191



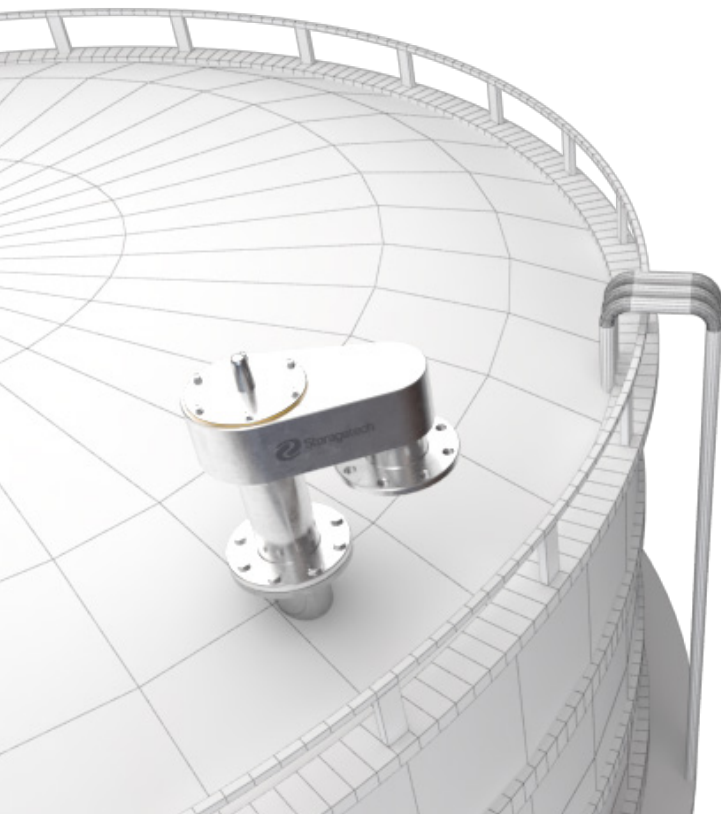
Product Description

Storagetech™ 's Model 191 Top Mounted, Pipe Away, Weight Loaded Vacuum Relief Valve provides protection to bulk storage tanks and vessels from excessive under pressurisation. The valves are mounted on the tank roof flange or a vent pipe from the vapour space. System is especially preferred for transferring vapour content to collection system or condensation units, even prevent certain fire hazards. The vacuum relief pallet and diaphragm assembly is held tightly against a seal to prevent the loss of vapour to atmosphere in the closed position. As the internal pressure in the tank decreases, due to emptying vacuum conditions occurs, the balance between the tank pressure and the external atmospheric pressure changes. Accordingly when the set pressure of the unit is reached, the diaphragm opens to vacuum gas content and rebalance the internal pressure. Storagetech Valves Activated as close as to set pressures, less than 10% of set pressures, ensuring accurate pressure management and isolate emission losses perfectly.



With 40 years of experience, Storagetech™ PVV systems offer effective solutions against unwanted evaporation and vacuums that may occur in tanks.

Thanks to PVV solutions produced completely in accordance with international norms, Storagetech™ is a reliable, sustainable and effective solution partner for your investments.



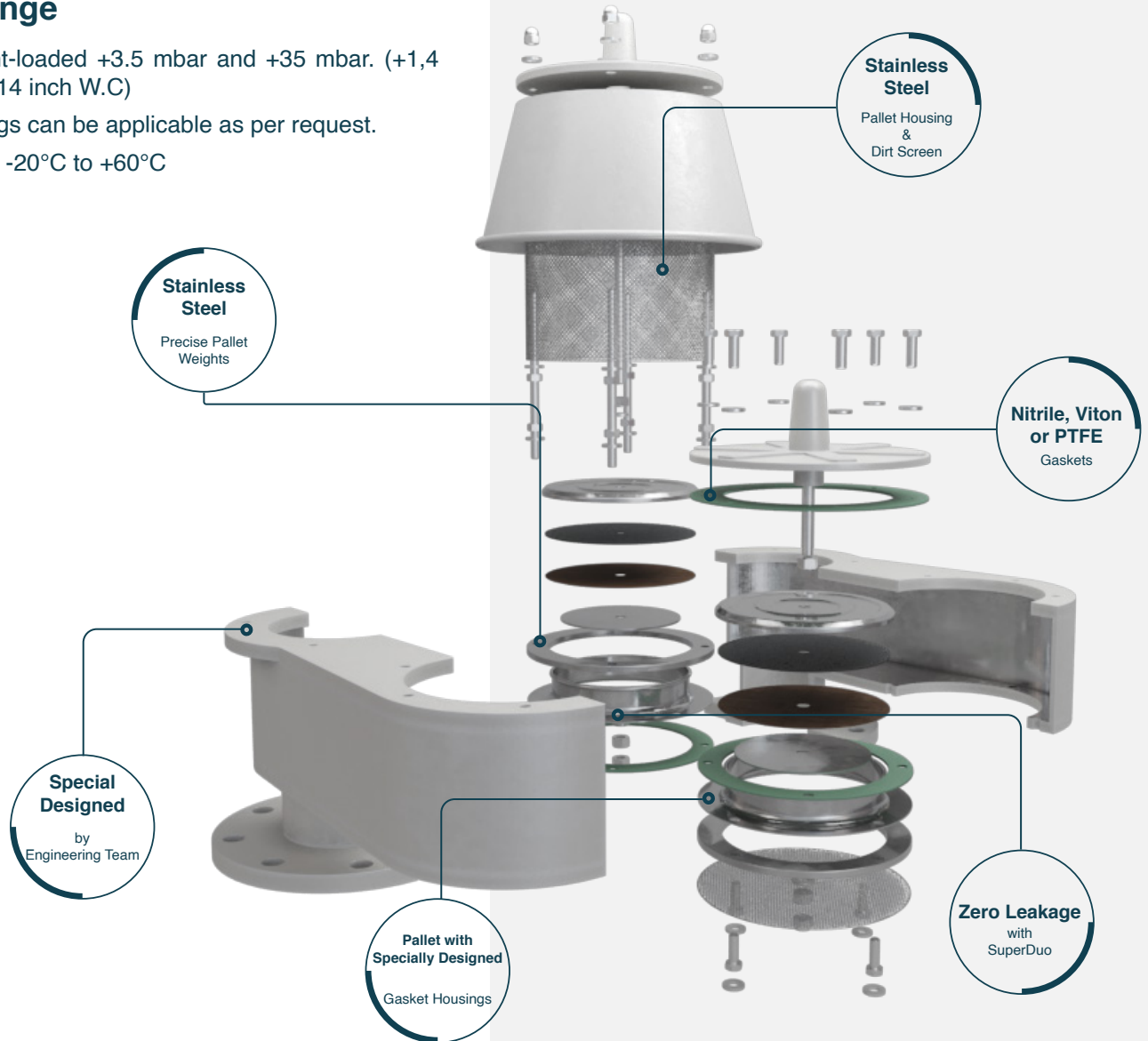
Standard Sizes	2" to 12" (DN50 to DN300) Further sizes are applicable upon request.
Flanges	ANSI, DIN, JIS, BSP
Body	Carbon Steel, Stainless Steel or Aluminium
Seals	Klingrit, Nitrile, Viton, PTFE
Pallet	Stainless Steel AISI 304/316
Springs	Stainless Steel
Paint Finish	1. Customer Specification 2. Powder Coating, Colour RAL 9006 3. Epoxy Paint, Colour RAL 9006 4. PTFE Coating
ATEX Cert	Ex II 1/2 G c II B

Setting Range

Vacuum Weight-loaded +3.5 mbar and +35 mbar. (+1,4 inch W.C and +14 inch W.C)

*Different settings can be applicable as per request.

Ambient temp. -20°C to +60°C

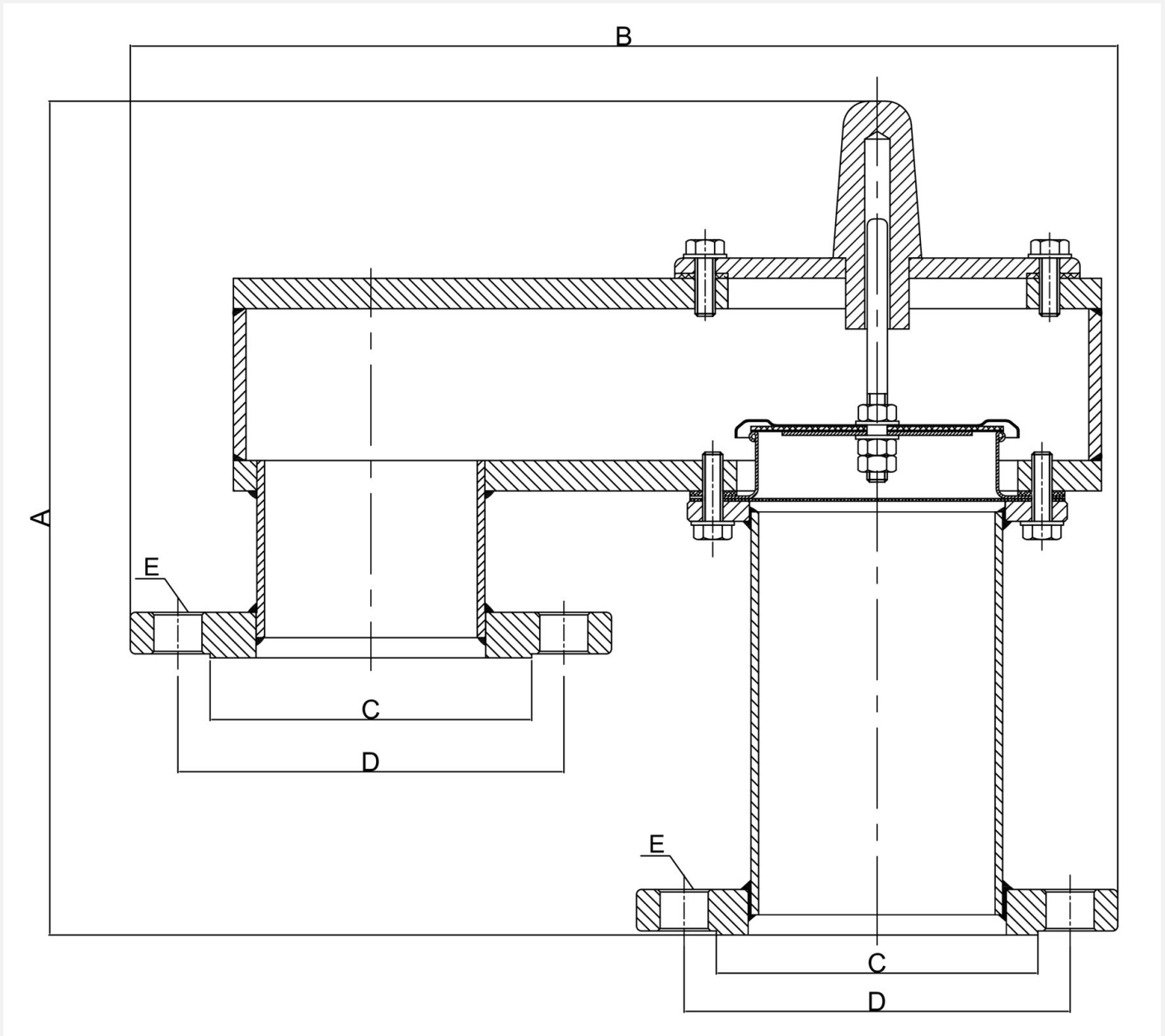


Key Features

- Easy to install. Do not need a special tool or experience.
- Transferring vapour content to collection system or condensation units.
- Prevent certain fire hazards.
- Light weight construction.
- Quick and easy to install, inspect and clean.
- Any grade materials are available.
- Has stainless steel pallets.
- Special designs can be achieved upon request to meet individual specifications.
- Eliminate the intake of air content (if needed) and the escape of vapors.
- Internal materials are resistant to winter conditions.
- Vacuum and relief cases can be managed effectively as per the set requirements of bulk storage tank.

- Super Duo technology provides extra curves and perfect seating with zero leakage.
- Set values can be arranged as per the site conditions, no need supervising.
- Design, manufacturing and test according to EN ISO 80079-36.
- PTFE, XYLAN, Rubber lining, etc. coating options are available.
- ANSI, DIN, JIS, API, etc. any special end connections are available.
- Breathing requirements are fulfilled according to API 2000 7th Edition.
- Diaphragm is manufactured from PTFE material to prevent possibility of ice formation and sticky residues hindering the valve from opening, while the pallet assembly moves freely on guide posts.

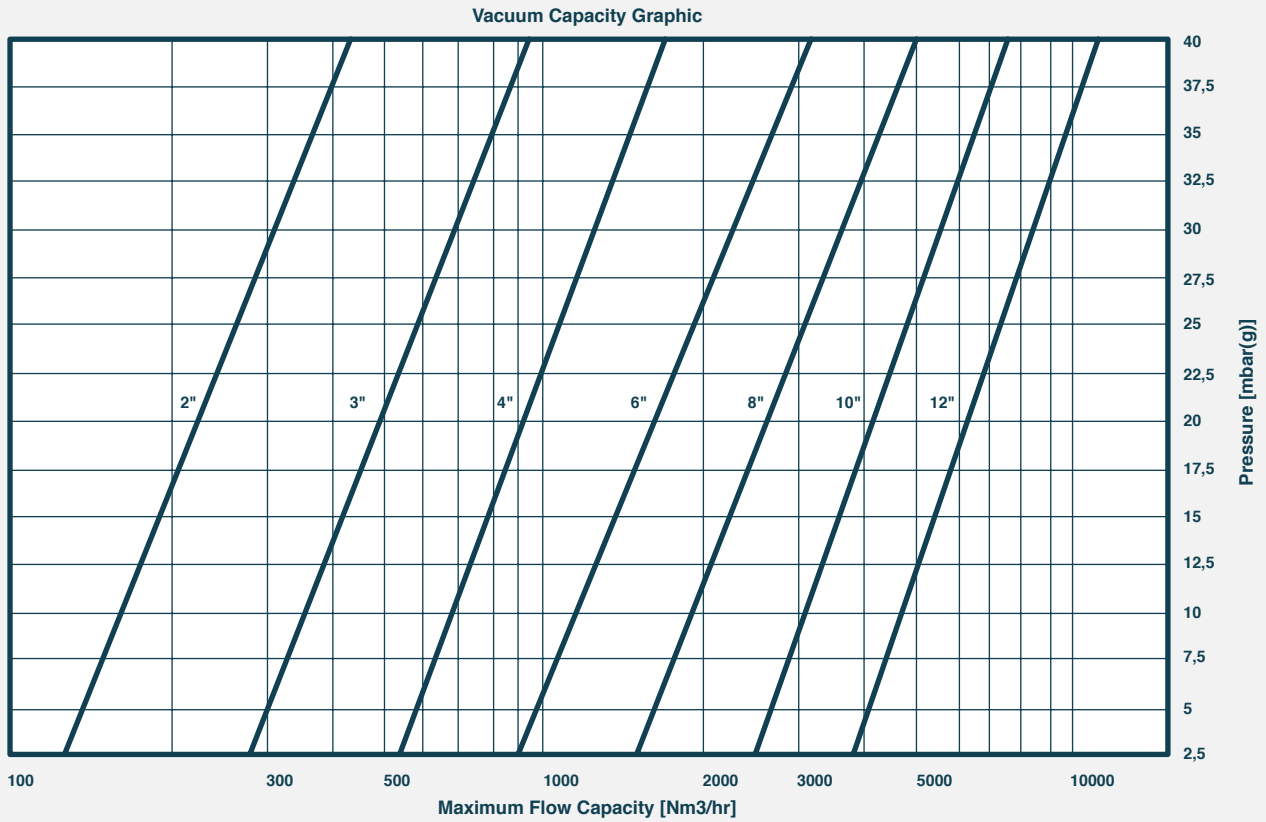
Technical Drawing



Weight & Dimensions

SIZE		A	B	C		D		E		TOTAL WEIGHT (kg)
NPS	DN			ANSI 150# RF	DN	ANSI 150# RF	DN	ANSI 150# RF	DN	
2"	50	200	271	Ø92.1	Ø102	Ø120.6	Ø125	Ø19x4	Ø18x4	13
3"	80	219	349	Ø127	Ø138	Ø152.4	Ø160	Ø19x4	Ø18x8	21
4"	100	280	446	Ø157.2	Ø158	Ø190.5	Ø180	Ø19x8	Ø18x8	31
6"	150	282	616	Ø215.9	Ø212	Ø241.3	Ø240	Ø22.2x8	Ø22x8	42
8"	200	329	751	Ø269.9	Ø268	Ø298.4	Ø295	Ø22.2x12	Ø22x12	74
10"	250	405	871	Ø323.8	Ø320	Ø362	Ø355	Ø25.4x12	Ø26x12	96
12"	300	441	997	Ø381	Ø378	Ø431.8	Ø410	Ø25.4x12	Ø26x12	140

Flow Capacity Tables



VACUUM RELIEF CAPACITIES [Nm³/hr] - UNDERPRESSURE WEIGHTED

mbar	2"		3"		4"		6"		8"		10"		12"	
	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%
2,5	119	127	268	285	567	604	963	1026	1549	1651	2739	2918	3906	4161
5	182	194	347	369	653	695	1363	1452	2145	2286	3324	3542	4780	5092
7,5	245	261	426	454	706	752	1772	1888	2628	2800	3561	3794	5313	5660
10	254	270	505	538	777	828	2127	2266	3042	3241	3888	4143	5284	6024
12,5	262	279	550	586	936	998	2339	2492	3301	3517	4216	4492	5995	6387
15	286	304	593	632	1017	1083	2526	2692	3638	3876	4452	4744	6101	6955
17,5	309	329	658	701	1140	1214	2678	2853	4004	4266	4888	5208	7061	7523
20	361	384	708	755	1279	1363	2785	2967	4296	4577	5580	5945	7735	8818
22,5	412	439	768	819	1317	1403	2869	3056	4588	4888	6272	6683	9492	10113
25	398	424	817	871	1344	1431	2926	3117	4811	5125	6708	7147	9369	10681
27,5	384	409	861	918	1396	1488	2984	3180	5042	5372	7143	7611	10558	11248
30	439	467	910	969	1772	1888	3044	3243	5312	5659	7703	8207	11338	12080

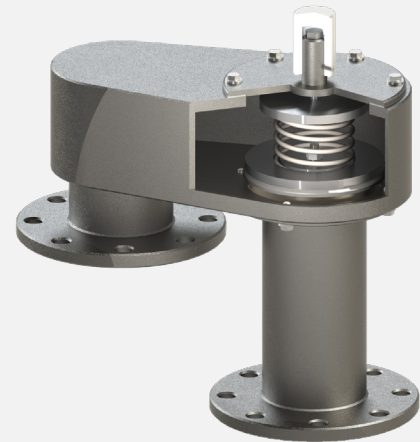
Vacuum Relief Valve

Top mounted, pipe-away, spring loaded
Model 192



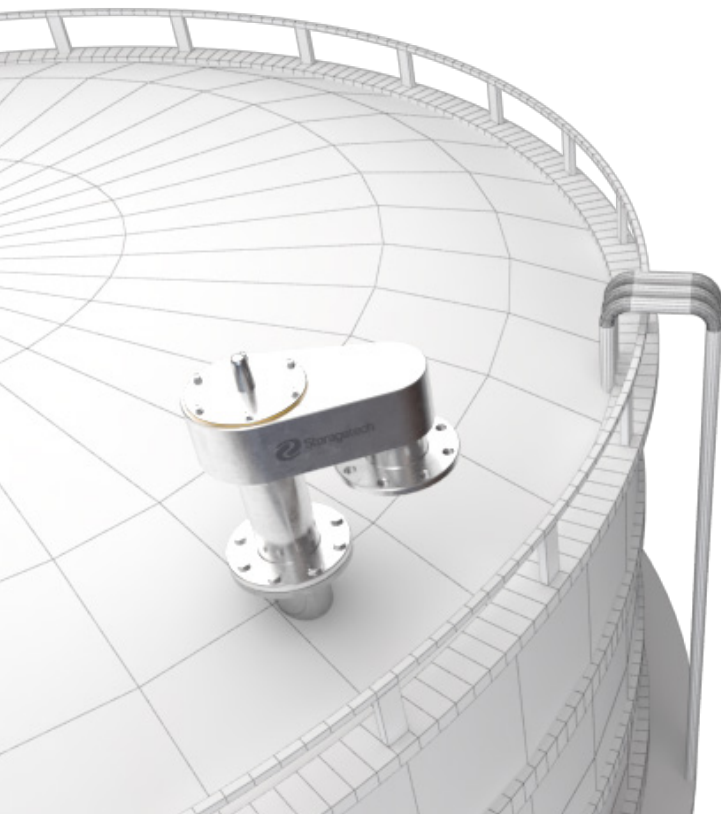
Product Description

Storagetech™ 's Model 192 Top Mounted, Pipe Away, Spring Loaded Vacuum Relief Valve provides protection to bulk storage tanks and vessels from excessive under pressurisation. The valves are mounted on the tank roof flange or a vent pipe from the vapour space. System is especially preferred for transferring vapour content from collection system or condensation units, even prevent certain fire hazards. The vacuum relief pallet and diaphragm assembly is held tightly against a seal to prevent the loss of vapour to atmosphere in the closed position. System back pressure are also included in balance calculations to achieve desired certain seat and re-seat actions. As the internal pressure in the tank decreases, due to emptying vacuum conditions occurs, the balance between the tank pressure and the external atmospheric pressure changes. Accordingly when the set pressure of the unit is reached, the diaphragm opens to vacuum air content and rebalance the internal pressure. Storagetech Valves Activated as close as to set pressures, less than 10% of set pressures, ensuring accurate pressure management and isolate emission losses perfectly.



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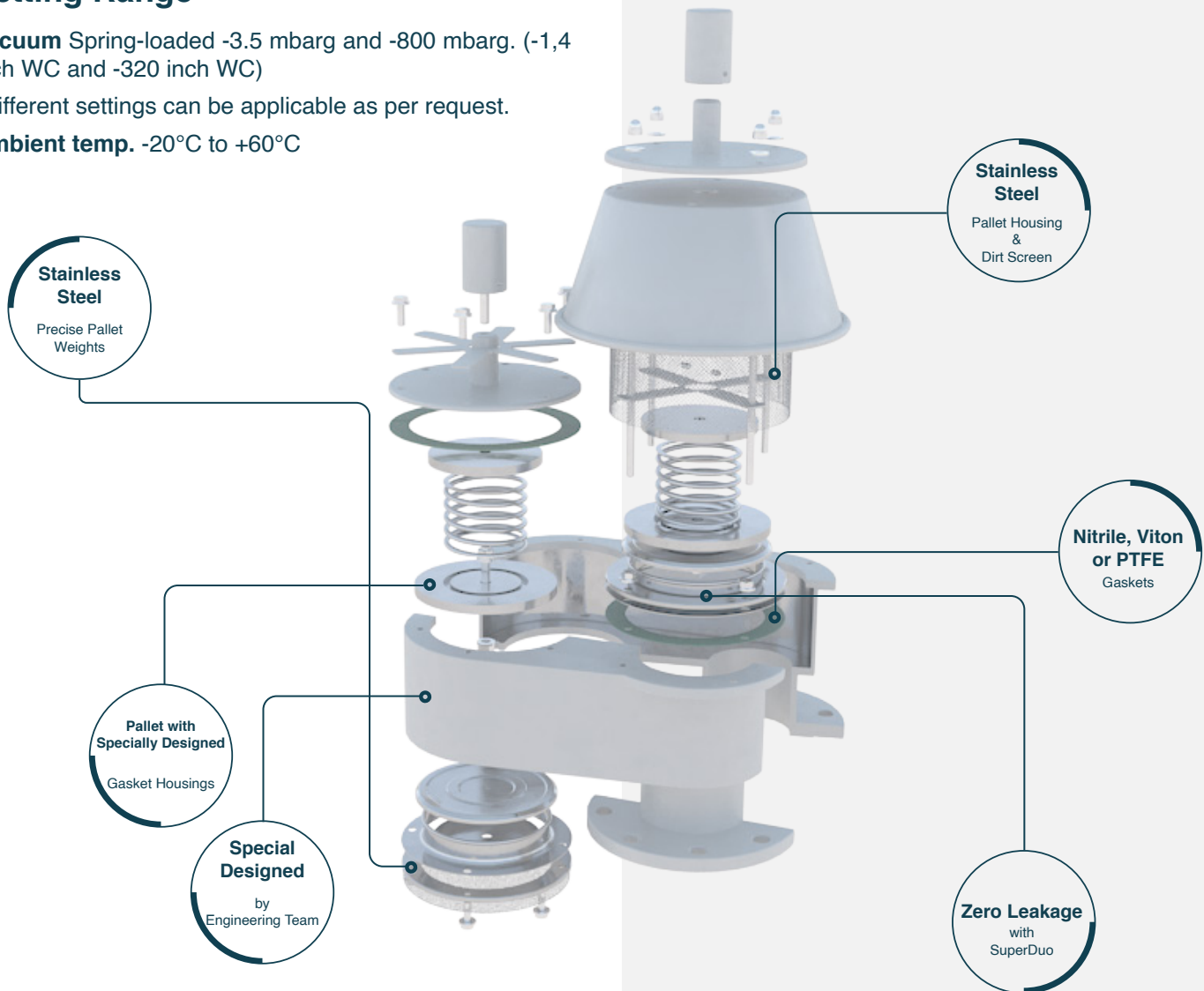
Standard Sizes	2" to 12" (DN50 to DN300) Further sizes are applicable upon request.
Flanges	ANSI, DIN, JIS, BSP
Body	Carbon Steel, Stainless Steel or Aluminium
Seals	Klingrit, Nitrile, Viton, PTFE
Pallet	Stainless Steel AISI 304/316
Springs	Stainless Steel
Paint Finish	1. Customer Specification 2. Powder Coating, Colour RAL 9006 3. Epoxy Paint, Colour RAL 9006 4. PTFE Coating
ATEX Cert	Ex II 1/2 G c II B

Setting Range

Vacuum Spring-loaded -3.5 mbarg and -800 mbarg. (-1,4 inch WC and -320 inch WC)

*Different settings can be applicable as per request.

Ambient temp. -20°C to +60°C

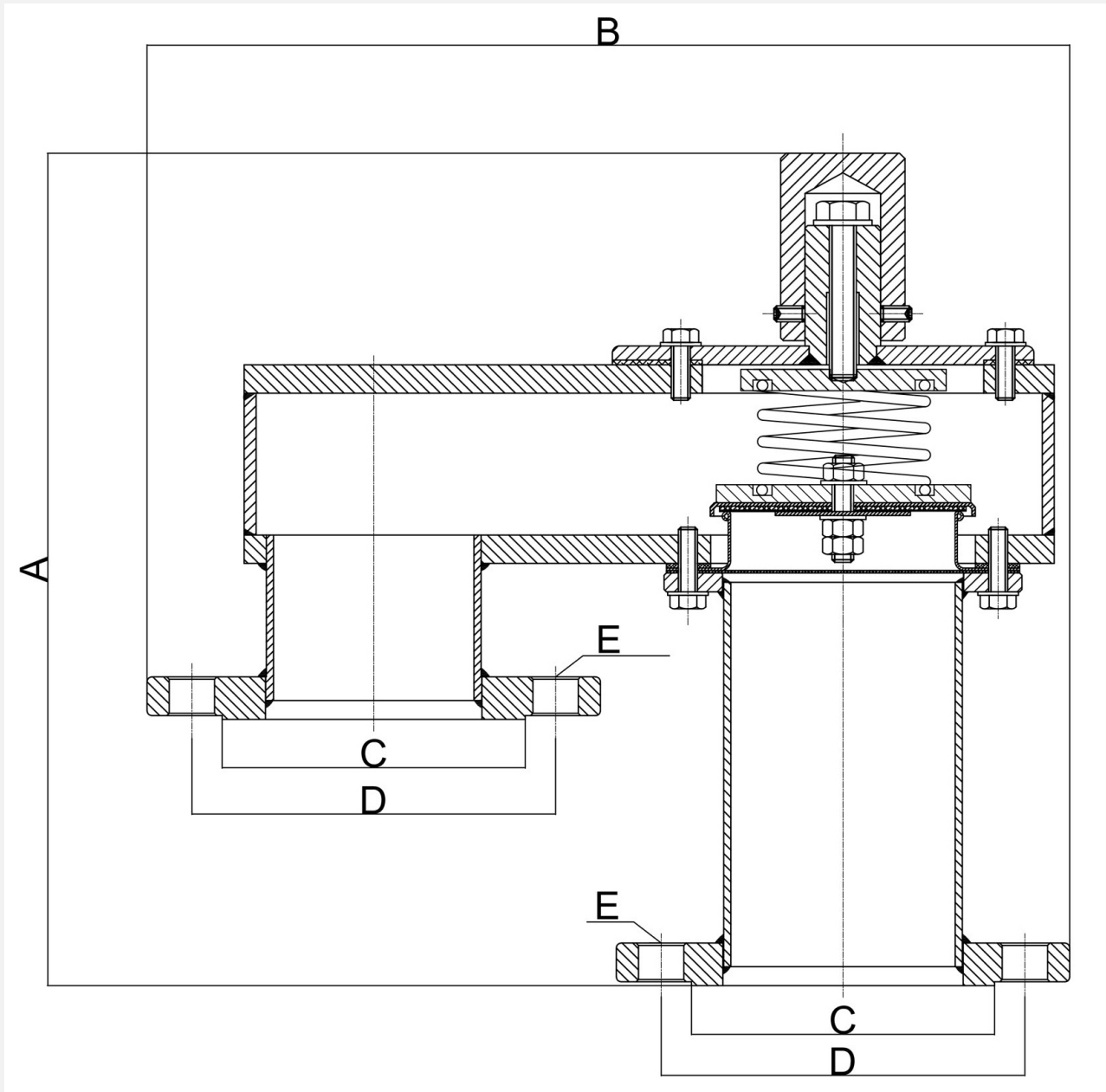


Key Features

- Easy to install. Do not need a special tool or experience.
- Transferring vapour content to collection system or condensation units.
- Prevent certain fire hazards.
- Light weight construction.
- Quick and easy to install, inspect and clean.
- Any grade materials are available.
- Has stainless steel pallets.
- Special designs can be achievable upon request to meet individual specifications.
- Eliminate the intake of air content (if needed) and the escape of vapors.
- Internal materials are resistant to winter conditions.
- Vacuum and relief cases can be managed effectively as per the set requirements of bulk storage tank.

- Super Duo technology provides extra curves and perfect seating with zero leakage.
- Set values can be arranged as per the site conditions, no need supervising.
- Design, manufacturing and test according to EN ISO 80079-36.
- PTFE, XYLAN, Rubber lining, etc. coating options are available.
- ANSI, DIN, JIS, API, etc. any special end connections are available.
- Breathing requirements are fulfilled according to API 2000 7th Edition.
- Diaphragm is manufactured from PTFE material to prevent possibility of ice formation and sticky residues hindering the valve from opening, while the pallet assembly moves freely on guide posts.

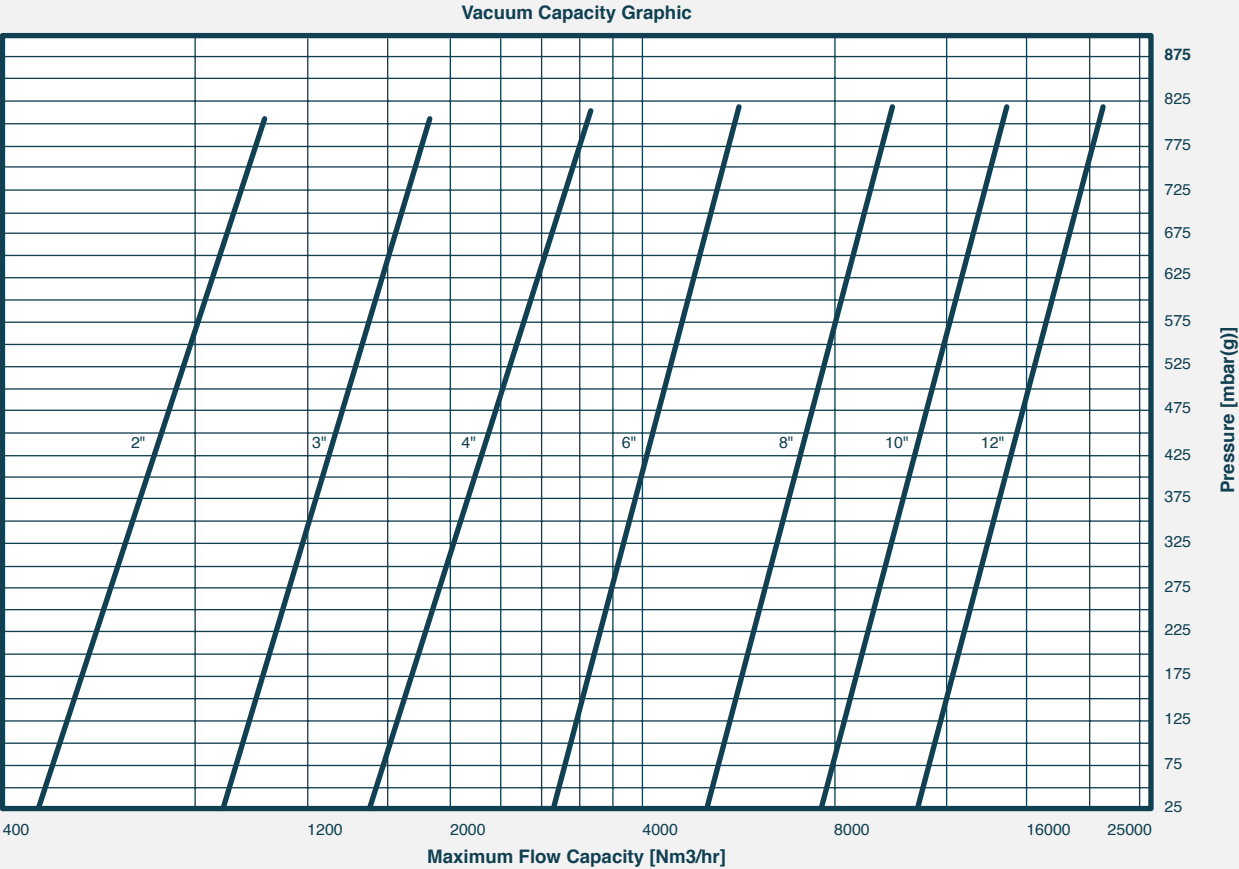
Technical Drawing



Weight & Dimensions

SIZE		A	B	C		D		E		TOTAL WEIGHT (kg)
NPS	DN			ANSI 150# RF	DN	ANSI 150# RF	DN	ANSI 150# RF	DN	
2"	50	200	271	Ø92.1	Ø102	Ø120.6	Ø125	Ø19x4	Ø18x4	14
3"	80	219	349	Ø127	Ø138	Ø152.4	Ø160	Ø19x4	Ø18x8	22
4"	100	280	446	Ø157.2	Ø158	Ø190.5	Ø180	Ø19x8	Ø18x8	33
6"	150	282	616	Ø215.9	Ø212	Ø241.3	Ø240	Ø22.2x8	Ø22x8	45
8"	200	329	751	Ø269.9	Ø268	Ø298.4	Ø295	Ø22.2x12	Ø22x12	76
10"	250	405	871	Ø323.8	Ø320	Ø362	Ø355	Ø25.4x12	Ø26x12	100
12"	300	441	997	Ø381	Ø378	Ø431.8	Ø410	Ø25.4x12	Ø26x12	143

Flow Capacity Tables

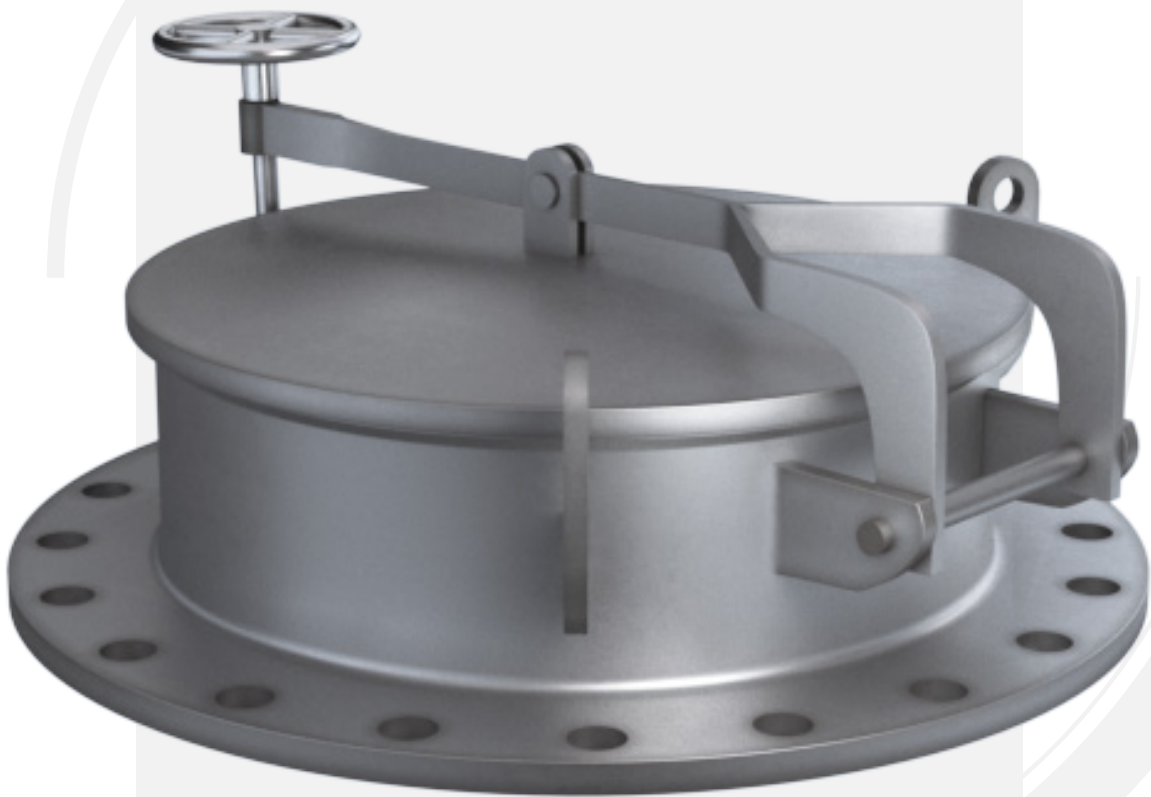


Flow Capacity Tables

VACUUM RELIEF CAPACITIES [Nm³/hr] - UNDERPRESSURE SPRING

mbar (g)	2"		3"		4"		6"		8"		10"		12"	
	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%
40	556	587	1031	1090	1813	1915	3138	3315	5475	5785	8260	8728	11686	12347
50	567	599	1052	1112	1849	1954	3200	3381	5584	5900	8425	8902	11920	12594
60	578	611	1073	1134	1886	1993	3264	3449	5696	6018	8594	9080	12158	12846
70	590	623	1095	1156	1924	2032	3330	3518	5810	6139	8766	9262	12401	13103
80	602	636	1116	1180	1962	2073	3396	3588	5926	6261	8941	9447	12649	13365
90	614	648	1139	1203	2001	2115	3464	3660	6045	6387	9120	9636	12902	13632
100	626	661	1162	1227	2041	2157	3533	3733	6165	6514	9302	9829	13160	13905
120	639	675	1185	1252	2082	2200	3604	3808	6289	6645	9488	10025	13423	14183
140	651	688	1208	1277	2124	2244	3676	3884	6415	6778	9678	10226	13692	14467
160	664	702	1233	1302	2166	2289	3750	3962	6543	6913	9872	10430	13966	14756
180	678	716	1257	1328	2210	2335	3825	4041	6674	7051	10069	10639	14245	15051
200	691	730	1282	1355	2254	2381	3901	4122	6807	7192	10270	10852	14530	15352
240	705	745	1308	1382	2299	2429	3979	4204	6943	7336	10476	11069	14820	15659
280	726	767	1347	1424	2368	2502	4099	4331	7152	7556	10790	11401	15265	16129
300	748	790	1388	1466	2439	2577	4222	4460	7366	7783	11114	11743	15723	16613
350	770	814	1429	1510	2512	2654	4348	4594	7587	8017	11447	12095	16195	17111
400	793	838	1472	1556	2587	2734	4479	4732	7815	8257	11791	12458	16681	17625
450	817	864	1516	1602	2665	2816	4613	4874	8049	8505	12144	12832	17181	18154
500	842	889	1562	1650	2745	2900	4751	5020	8291	8760	12509	13217	17696	18698
550	875	925	1624	1716	2855	3016	4941	5221	8622	9110	13009	13745	18404	19446
600	910	962	1689	1785	2969	3137	5139	5430	8967	9475	13529	14295	19140	20224
650	947	1000	1757	1856	3088	3262	5345	5647	9326	9854	14071	14867	19906	21033
700	985	1040	1827	1931	3211	3393	5558	5873	9699	10248	14633	15462	20702	21874
750	1024	1082	1900	2008	3340	3529	5781	6108	10087	10658	15219	16080	21530	22749
800	1065	1125	1976	2088	3473	3670	6012	6352	10490	11084	15828	16723	22392	23659

Manhole COVER



Certificates & Standards



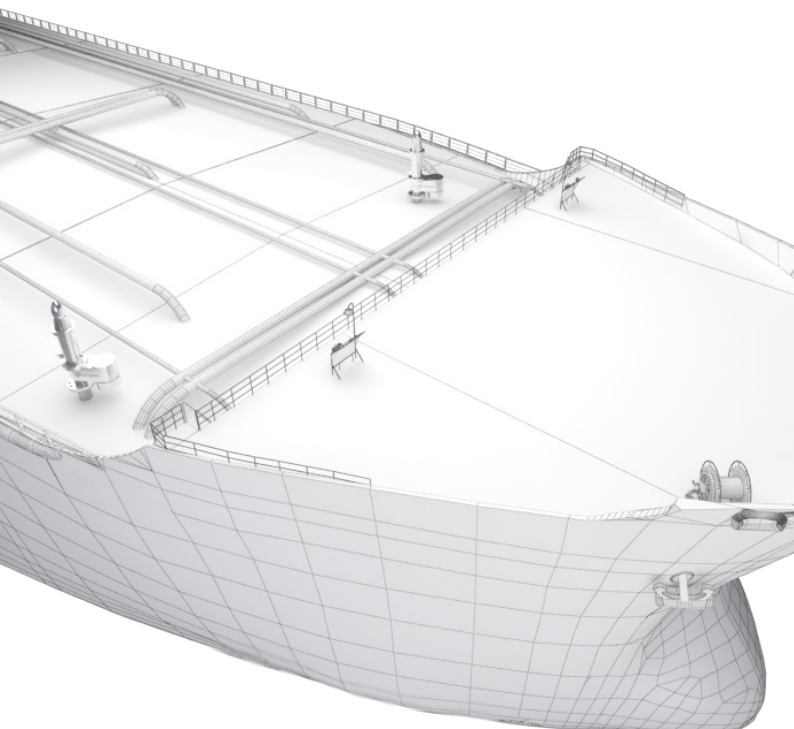
High Velocity Pressure Vacuum Valve



Model 170

Product Description

Product IMO / MSC Circulars 677/1009 Compliant with all the regulations and conditions specified in ISO 15364, ER-GIL High-Speed Pressure / Vacuum Valve provides active protection against fire and explosion on the deck. If used SS316, it increases the resistance against extreme weather conditions. Being at least 30m /s of the gas exit velocity of the inside is evacuated and closed without taking the spark to the ship's deck. The vacuum top cover on the product which will provide extra safety during tank filling/ emptying and cleaning. The vacuum top cover is closed with flame curtain and there is no flame entry inside. The pressure and vacuum arms offered to the manual service are an option to remove sudden freezing conditions that may occur in adverse weather conditions. The product minimizes gas loss. Usable compact material and design provide a long maintenance-free cycle. Depending on the storage capacity of the tank, a pressure change calculation is made and can be manufactured with a non-standard boundary pressure value as required.

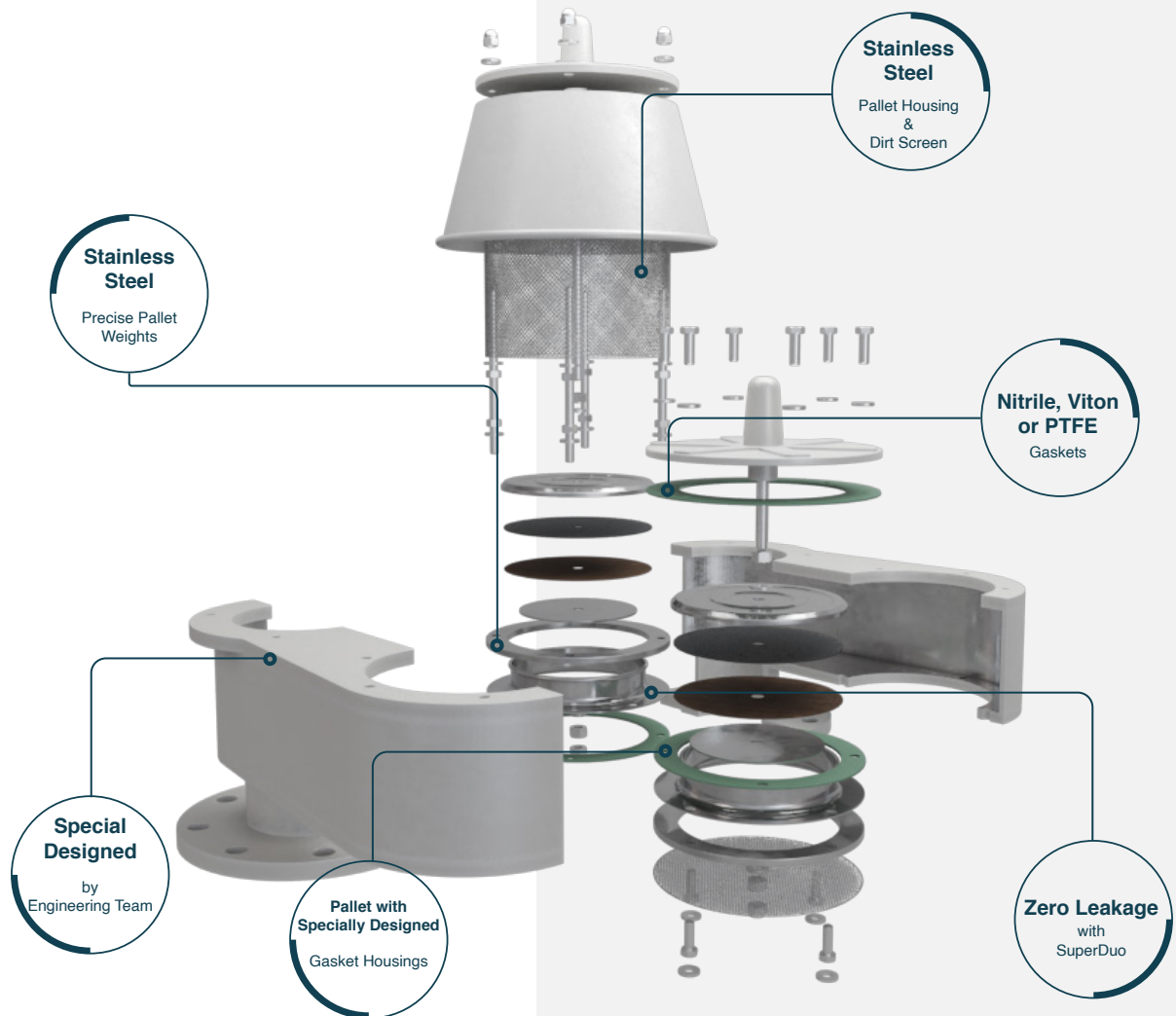


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Manufacturing Materials

Housing	Seal/Pallet	Pallet Seal	Hardware	Weights	Gaskets
Cast Aluminum	Aluminum	FEP Teflon	304 S.S.	Carbon Steel	Compressed Fiber
304 S.S.	304 S.S.		316 S.S.	304 S.S.	Clinger
316 S.S.	316 S.S.			316 S.S.	
				Lead	



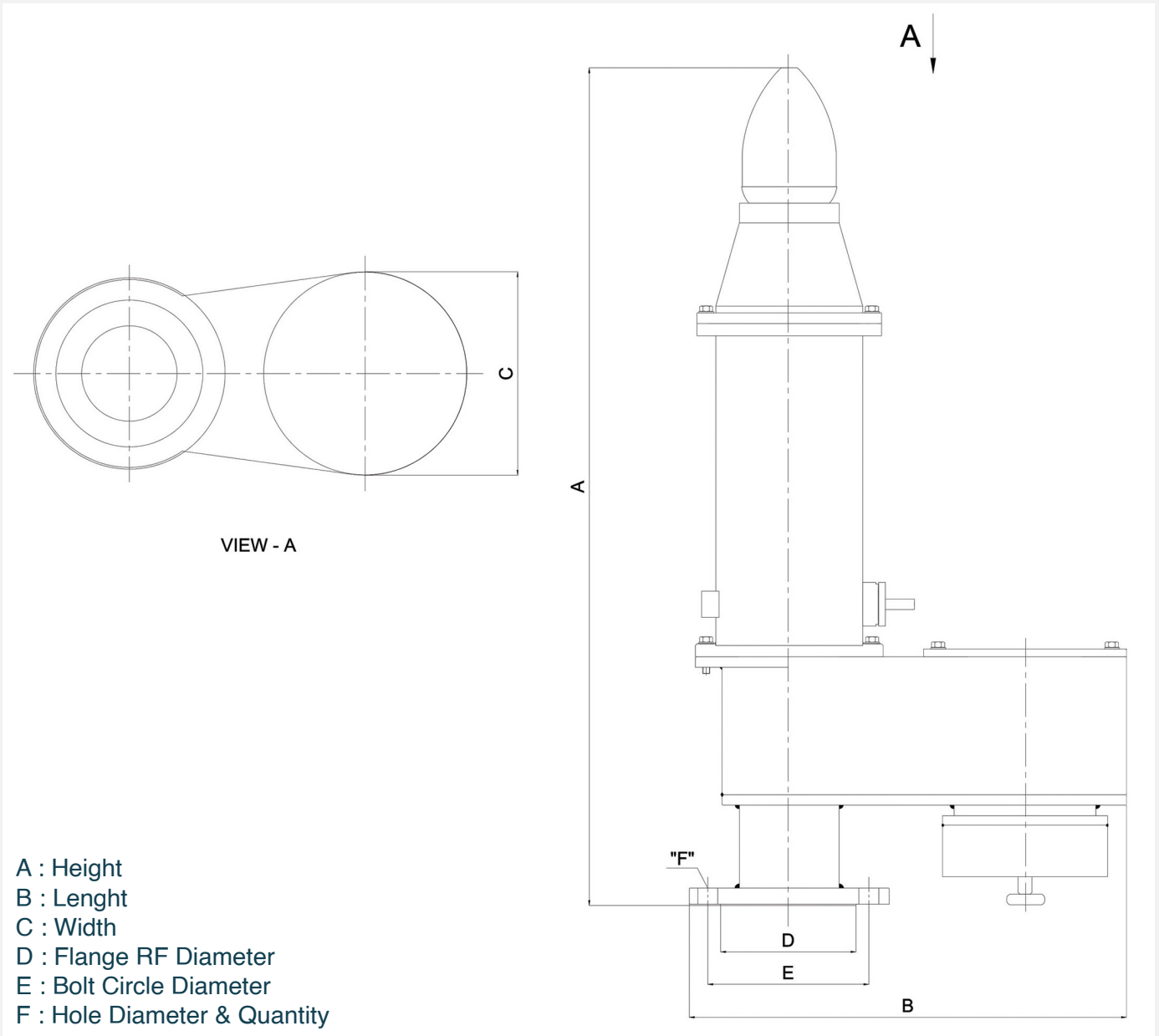
Key Features

- The design is lighter compared to other competitors.
- The magnetic field created in the body, a special design flame-retarding curtains mounted on the lower vacuum and upper discharge points of the device provide a safe environment in order to prevent glare and flaming that may occur outside the tank from leaking into the tank.
- No need for internal maintenance.
- It can be used without detachability except for control, cleaning and maintenance.
- The cargo for steam burning meets the new IMO and MED requirements (MESG 0.9 & 0.65 mm).

Why do you need a high velocity pressure vacuum valve?

- Prevents unwanted gas escaping; minimize product loss and protects the environment.
- Blocks flame entering to tank.
- Provides lower flammable limit by realizing the gas above the flammable range.
- Provides safe working environment on the ship deck.
- Minimize odour threshold.
- Reduce noise during loading & unloading.

Technical Drawing



Weight & Dimensions

SIZE		A	B	C	D		E		F	
NPS	DN				ANSI 150# RF	PN 16	ANSI 150# RF	PN 16	ANSI 150# RF	PN 16
3"	80	705	375	180	127	138	152.4	160	Ø19x4	Ø18x8
4"	100	960	500	233	157.2	158	190.5	180	Ø19x8	Ø18x8
6"	150	1250	650	300	216	212	241.3	240	Ø22x8	Ø22x8

Pressure Vacuum Valve TEST BENCH



CO₂ Storage Tank Vent Absorber



Model 1200

Product Description

Storagetech™ Model 1200 CO₂ Storage Tank Vent Absorber is Low-Pressure-Drop filtering product. Designed for liquids that interact with gases, dusts as well as particulates which takes into the storage tanks from atmosphere during emptying operation.

The gas and particulate capturing methods are to determined product specific. In accordance with the needs determined for each liquid type, required analyses are carried out by our experienced engineering teams and the right product is offered for the desired system protection for your valuable systems.

According to provided basic technical data and info such like, liquid type, operation temperature and pressure, total storage tank capacity, number of turnovers during year are enough to determine the product material, cartridge and filtration type as well as cartridge replacement time.



Construction

Standard Sizes	2" to 16" NB inlet/outlet			
Materials	Aluminium Stainless steel Carbon steel Note: For the corrosive chemical; teflon, xylan, ceramic is available.			
Item	Aluminium	Carbon Steel	Stainless Steel	Industrial Plastics
Body Material	1050 H14(AL)	S 235, S275, S355	SA 240 Gr. 304/316	PP, HDPE, PVC, PVDF
Trim Material	SS 304 / SS 316			
Hardware	SA 153 / SS304 / SS316			
Gasket For P.V.R.V	NITRILE / VITON			
Gasket For Gas Absorber	KLINGERITE			

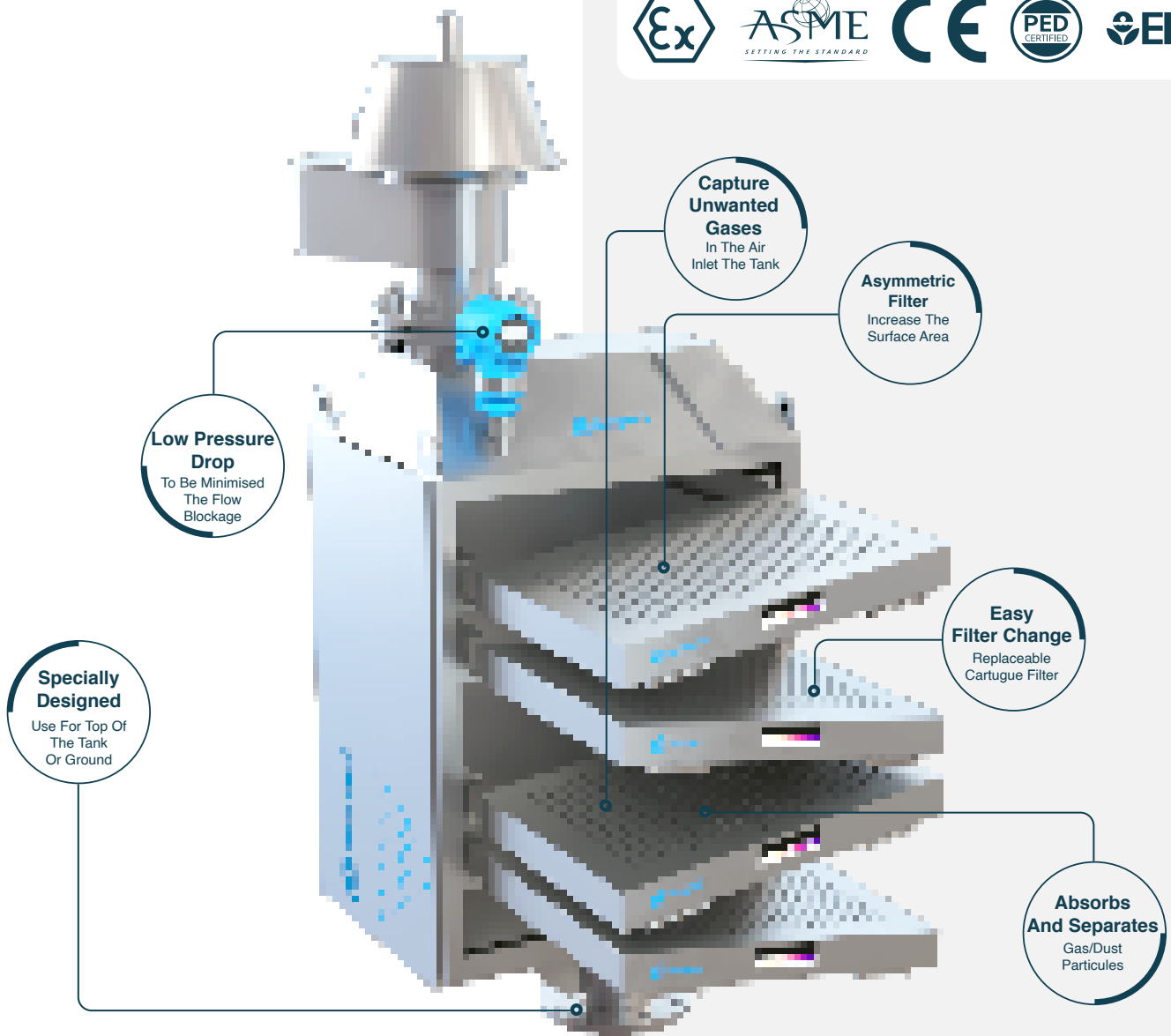
Specialising

Each request is specially evaluated and applicable methods are presented. Filtration process is carried out by both physical and chemical methods. Absorbent must be chosen truly. Based on the correct definition of the unwanted gas or content, appropriate absorbent method can be chemical, physical or both which shall be applied to provide maximum effectiveness.

Additional Equipment

Utilizing combined ATEX certified flame arrester for flammable liquids, system protection can be achieved successfully. Specially designed flame arresters can be certified both IIA/IIB Gas Groups.

Certificates & Standards



Key Features

- Prevents humidity and unwanted gas or content.
- Prevent corrosion effects.
- Absorbent color can be change.
- Change can observed with sight glass.
- Can be follow by automation from the control center.
- Easy filter change.
- Specially designed for use top of the tank or ground usage.
- Absorb gases in the air inlet the tank.
- To be increase gas contact surface area by the asimet-ric filter placement.
- Low pressure drop.

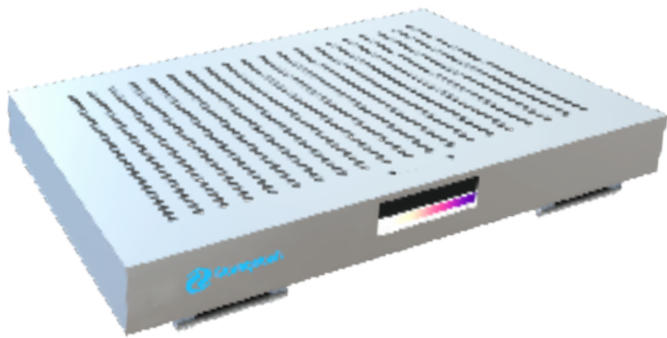
Product Benefits

The absorption effect of the filters are maximized by specially designed increased geometry to slowing down the flow as much as possible to increase contact time of the molecules with absorbent.

By increasing the surface area with asymmetrically placed filter cartridges, unwanted gases are absorbed providing longer route and area to find enough time to contact with absorbent particles, thereby completely removal action is achieved successfully.

Thanks to the inclined roof design, issues that may arise due to atmospheric effects on the product are minimized and product life is extended any issue.

It has already have own Pressure-Vacuum breathing vent which shall be delivered to site already set for operation pressure.



Different Option for Filter: HEPA

Model 1200 work with a specially designed HEPA filter for maximum filtration efficiency. HEPA, which stands for High Efficiency Particulate Air, is a designation used to describe filters that are able to trap 99.97 percent of particles that are 0.3 microns.

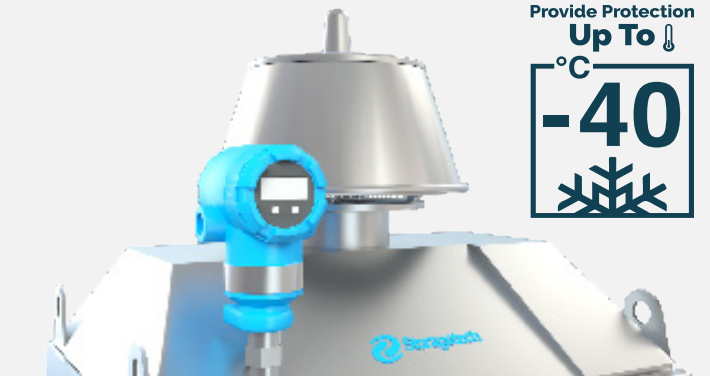
This HEPA filters can also be easily extracted for cleaning and replacement.

Particules following a line of flow in the air stream come within one radius of a fiber and adhere to it. Mid side particules are being captured by this process.

Particules below 0.3 microns are captured by diffusion in HEPA filter. An enhancing mechanism that is a result of the collision with gas molecules by the smallest particules, especially those below 0.1 microns in diameter, which are thereby impeded and delayed in their path through the filter; this behavior is similar to Brownian motion and raises the probability that a particle will be stopped by either interception or impaction; this mechanism becomes dominant at lower air flow.

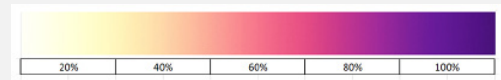
Custom - Made Designing

Winter protection systems are specially designed for extreme cold areas, offered with self regulating heaters and insulation systems are provide protection up to -40C.

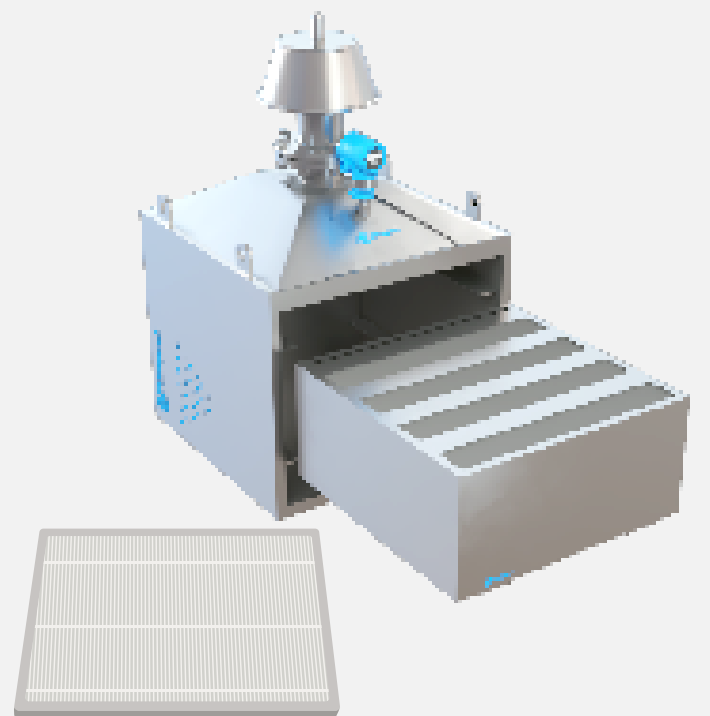


Pressure transmitter has the 4-20mA and having HART protocol. All activities can be monitored from the Control Center. The blockage of high, low or both impulse lines can be determined.

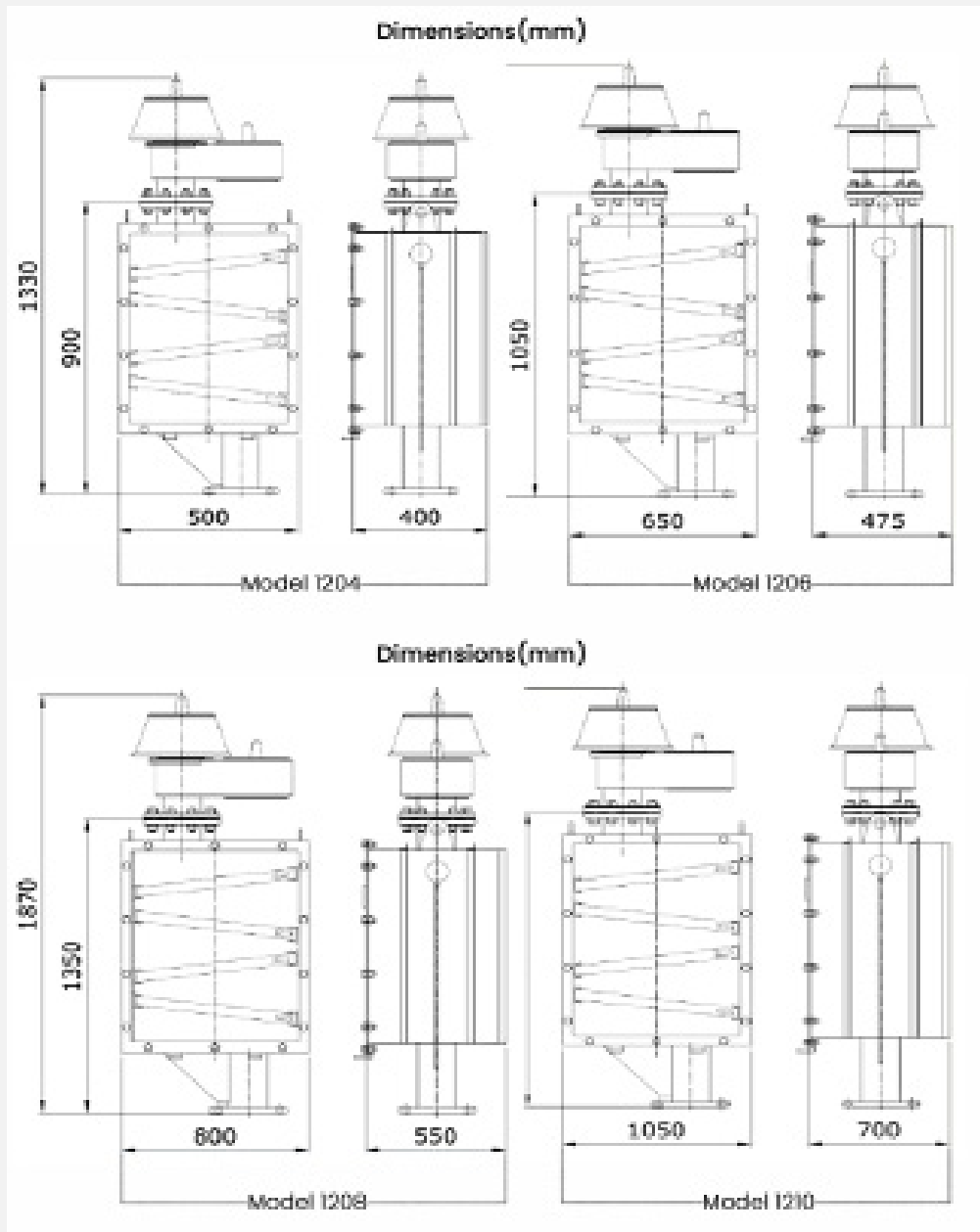
Pressure drops can be monitored utilizing differential pressure meter in the filter so that filter depletion that occurs before the planned product period or volumetric changes causing blockage issues are monitored effectively.



Color indicators are showing the depletion rate of the cartridges. Cartridge change can be achieved in a minutes with its user-friendly design.



Technical Drawing



Dimensions

SIZE		A (mm)	B (mm)	C (mm)	Max Flow Rate Pressure/Vacuum (Nm ³ /h)
NPS	DN				
2"	50	750	350	300	240/140
3"	80	800	400	325	500/290
4"	100	900	500	400	950/550
6"	150	1100	650	475	2100/1250
8"	200	1350	800	550	3500/1900
10"	250	1650	1050	700	4800/2900
12"	300	2050	1300	900	7100/4100
14"	350	1300	2100	1000	-
16"	400	1500	2500	1200	-

Model	Max. Air Flow Rate Pressure/Vacuum (liters/h)
1204	40.000
1206	60.000
1208	80.000
1210	100.000

Storage Tank Vent Odour Filter



Model 1400

Product Description

Storagetech™ Model 1400 Storage Tank Vent Odour Filter is offer a solution for your industrial environment with utilising special filtration systems for strong, nuisance odors due to evaporated gases. Storagetech™ Storage Tank Vent Odour Filter is developed to absorbe undesired odours from your zone continuously.

Also prevent extraction of harmful gasses to atmosphere during filling operations. Gas Absorbers is equipped with Low-Pressure-Drop MMHasso™ Filter cartridges. Replaceable MMHasso™ Filter cartridges contains cells and particulate filters.

Storagetech™ offers a special filtration products according to your system requirements. The odour absorption filters is specially designed and manufactured depend on the stored medium, ambient condition, working pressure & temperature as well as the equipment size. Storagetech™ Storage Tank Vent Odour Filter filtering system provides %98-%99 efficiency for removing the off-odours from your industrial environment.



Construction

Standard Sizes	2" to 16" NB inlet/outlet			
Materials	Aluminium			
	Stainless steel			
	Carbon steel			
	Note: For the corrosive chemical; teflon, xylan, ceramic is available.			
Item	Aluminium	Carbon Steel	Stainless Steel	Industrial Plastics
Body Material	1050 H14(AL)	S 235, S275, S355	SA 240 Gr. 304/316	PP, HDPE, PVC, PVDF
Trim Material	SS 304 / SS 316			
Hardware	SA 153 / SS304 / SS316			
Gasket For P.V.R.V	NITRILE / VITON			
Gasket For Gas Absorber	KLINGERITE			

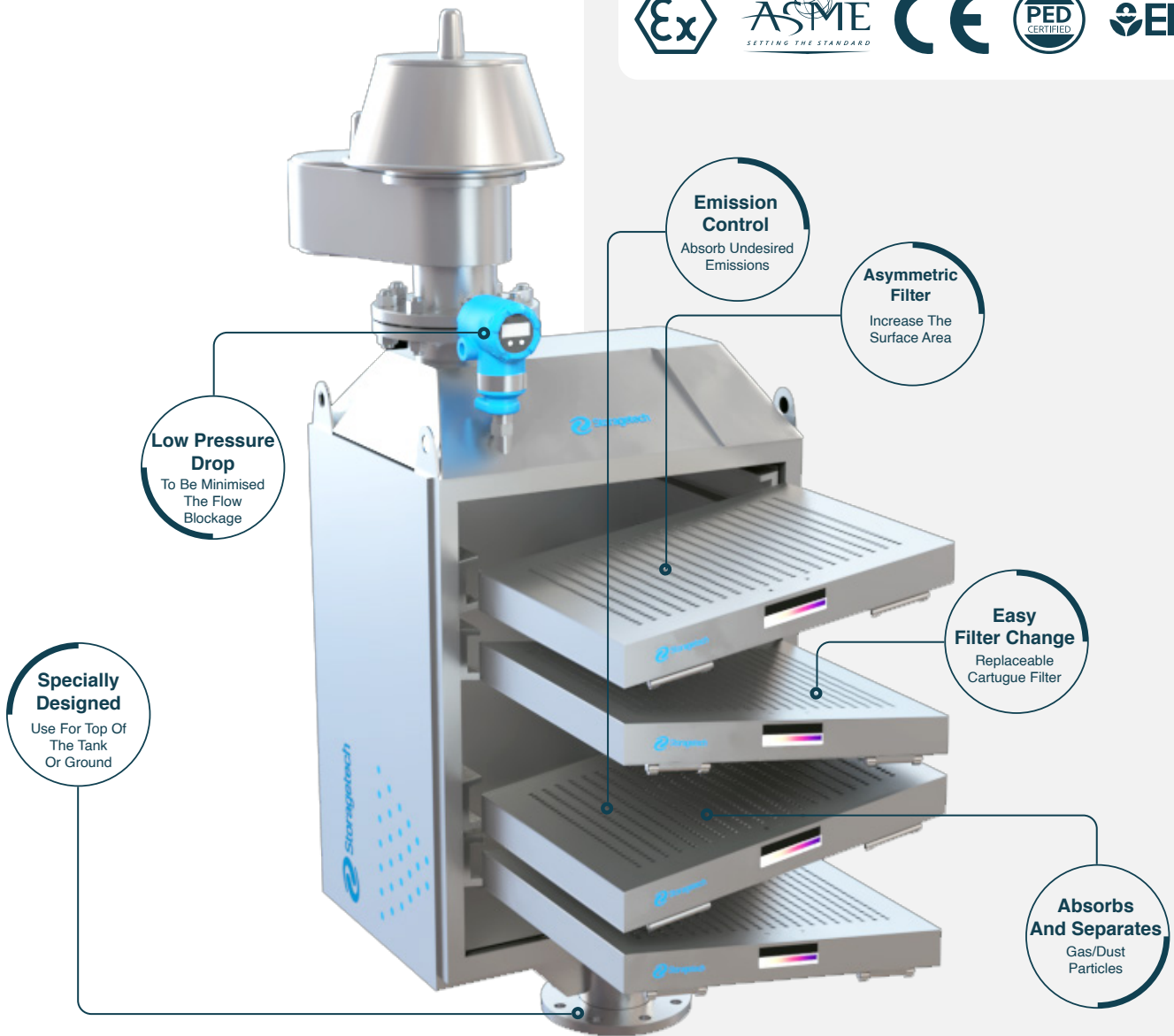
Specialising

Each request is specially evaluated and applicable methods are presented. Filtration process is carried out by both physical and chemical methods. Absorbent must be chosen truly. Based on the correct definition of the undesired gas or content, appropriate absorbent method can be chemical, physical or both which shall be applied to provide maximum effectiveness.

Additional Equipment

Utilizing combined ATEX certified flame arester for flammable liquids, system protection can be achieved successfully. Specially designed flame arresters can be certified both IIA/IIB Gas Groups.

Certificates & Standards



Key Features

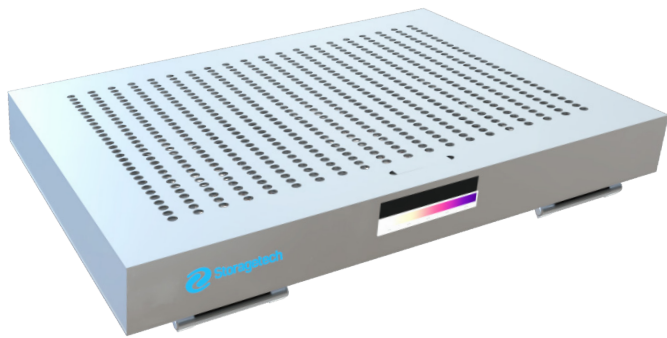
- Absorbing undesired odours and hazardous gases.
- Providing emission control.
- Working up to %99 efficiency. According to EPA LAER directive.
- Easy filter change.
- Low pressure drop.
- Easy maintenance.

Product Benefits

Storagetech™ Model 1400 Storage Tank Vent Odour Filter can be manufactured from any kind of applicable / corrosion resistant material such as aluminium, stainless steel, carbon steel, etc. according to your system requirements. It can be combined either with Pressure Vacuum Relief Valve or free vent.

Our Filters are mostly used for the mediums as biological sulfur (H_2S), ammonia (NH_3), mercaptans (CH_3S), sulfides (SO_x) and other Volatile Organic Compounds (VOC). VOC's are the most common air pollutant mediums. They are categorised as Aromatic hydrocarbons. Having higher vapor pressure VOCs cause higher air pollution rates.

Storagetech™ has specified the best filtration systems and turnkey solutions for your air zone according to environmental policies since years. We are honored to contribute to you with our specially designed products in accordance with the needs of our customers.



Different Option for Filter: HEPA

Model 1400 work with a specially designed HEPA filter for maximum filtration efficiency. HEPA, which stands for High Efficiency Particulate Air, is a designation used to describe filters that are able to trap 99.97 percent of particles that are 0.3 microns.

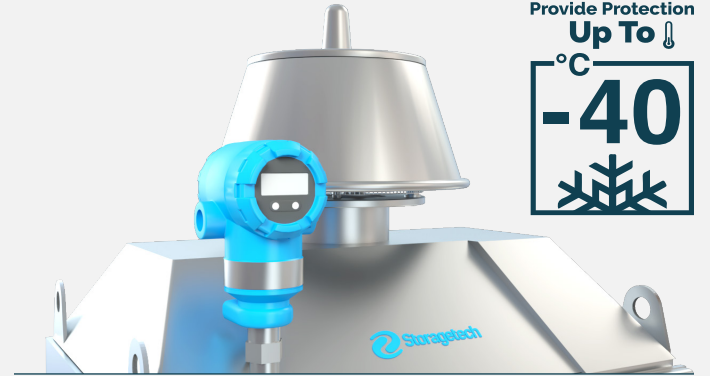
This HEPA filters can also be easily extracted for cleaning and replacement.

Particles following a line of flow in the air stream come within one radius of a fiber and adhere to it. Mid side particles are being captured by this process.

Particles below 0.3 microns are captured by diffusion in HEPA filter. An enhancing mechanism that is a result of the collision with gas molecules by the smallest particles, especially those below 0.1 microns in diameter, which are thereby impeded and delayed in their path through the filter; this behavior is similar to Brownian motion and raises the probability that a particle will be stopped by either interception or impaction; this mechanism becomes dominant at lower air flow.

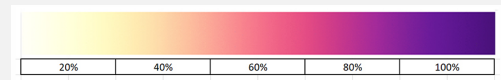
Custom - Made Designing

Winter protection systems are specially designed for extreme cold areas, offered with self regulating heaters and insulation systems are provide protection up to $-40C$.

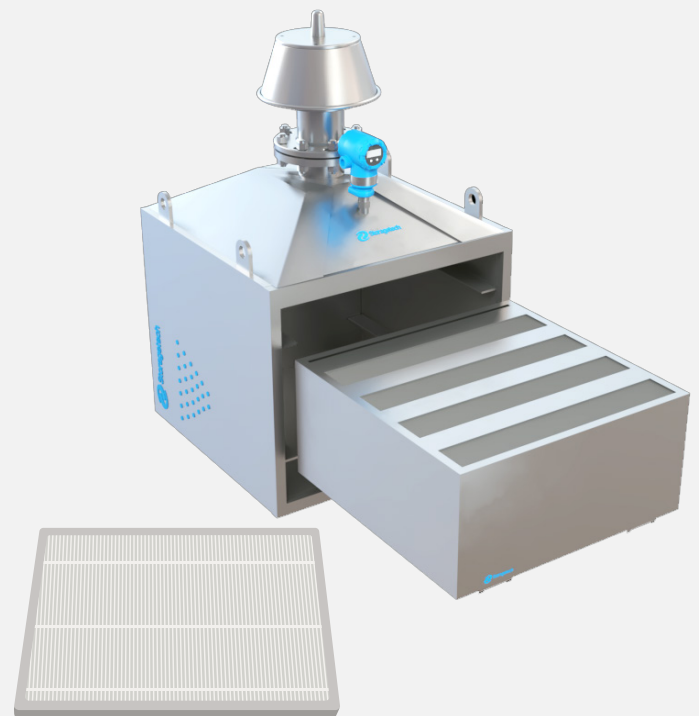


Pressure transmitter has the 4-20mA and having HART protocol. All activities can be monitored from the Control Center. The blockage of high, low or both impulse lines can be determined.

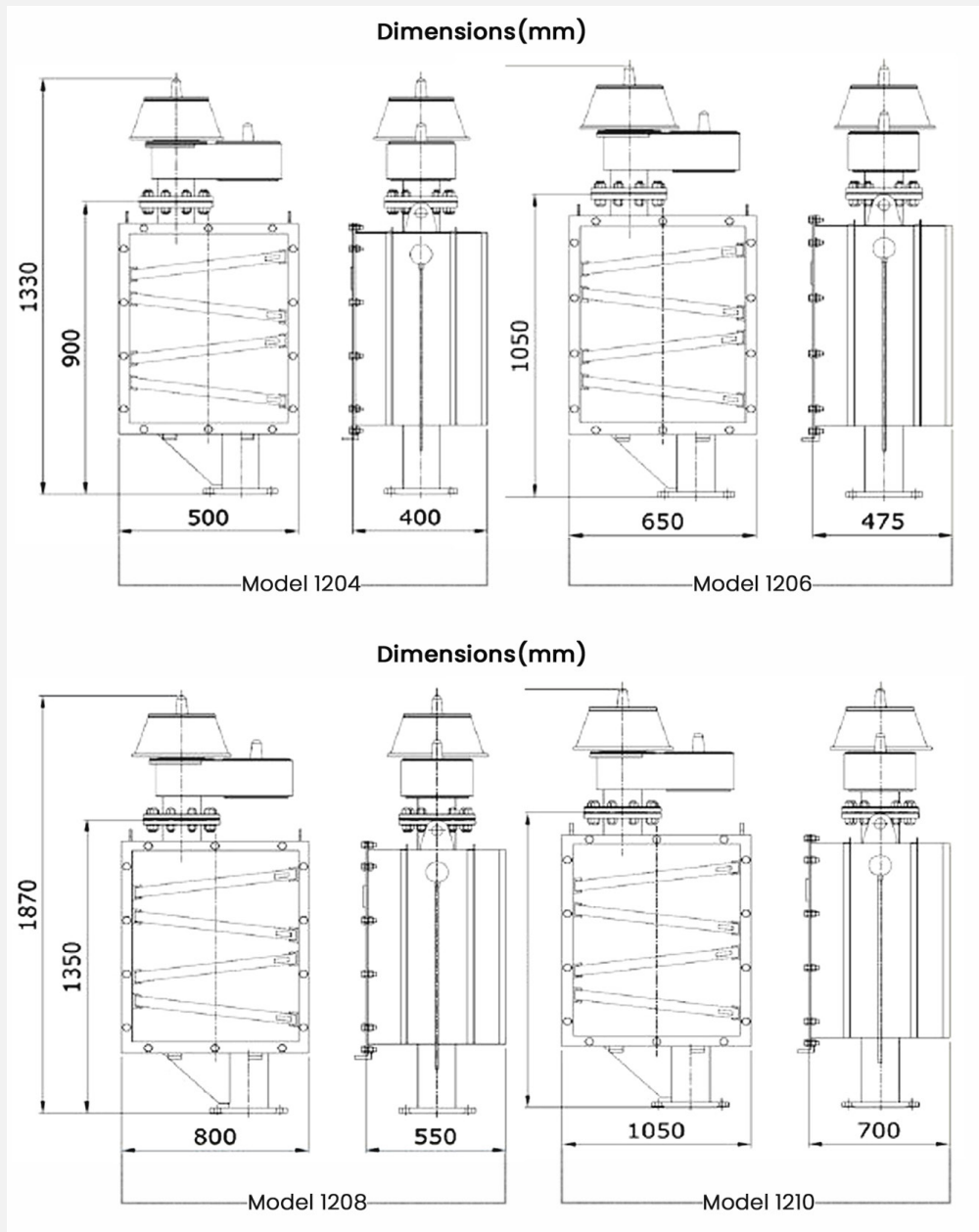
Pressure drops can be monitored utilizing differential pressure meter in the filter so that filter depletion that occurs before the planned product period or volumetric changes causing blockage issues are monitored effectively.



Color indicators are showing the depletion rate of the cartridges. Cartridge change can be achieved in a minutes with its user-friendly design.



Technical Drawing



Dimensions

SIZE		A	B	C	Max Flow Rate Pressure/Vacuum (Nm ³ /h)
NPS	DN	(mm)	(mm)	(mm)	
2"	50	750	350	300	240/140
3"	80	800	400	325	500/290
4"	100	900	500	400	950/550
6"	150	1100	650	475	2100/1250
8"	200	1350	800	550	3500/1900
10"	250	1650	1050	700	4800/2900
12"	300	2050	1300	900	7100/4100
14"	350	1300	2100	1000	-
16"	400	1500	2500	1200	-

Model	Max.Air Flow Rate Pressure/Vacuum (liters/h)
1204	40.000
1206	60.000
1208	80.000
1210	100.000

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catalog series

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