



## ANDERSON GREENWOOD WHESSOE 4142A PRESSURE OR VACUUM RELIEF VALVE

A weight loaded or spring loaded valve capable of providing both vacuum and pressure relief



### FEATURES

- Weight or spring loaded models available.
- Choice of body materials.
- Flange to flange connections.
- Stainless steel removable seats.
- Low ambient temperature version available.
- Full flange.
- ANSI and DIN flanges.

### GENERAL APPLICATION

The 4142A is capable of providing vacuum or pressure relief in storage tank farms, petroleum and chemical processing plants.

### TECHNICAL DATA

Materials: Aluminum, carbon steel, stainless steel  
Sizes: 2" to 12" (DN 50 to 300)

Pressure settings  
Weight loaded: 2.5 to 70 mbarg  
Spring loaded: 70 to 3500 mbarg

Vacuum settings  
Weight loaded: 2.5 to 70 mbarg  
Spring loaded: 70 to 800 mbarg

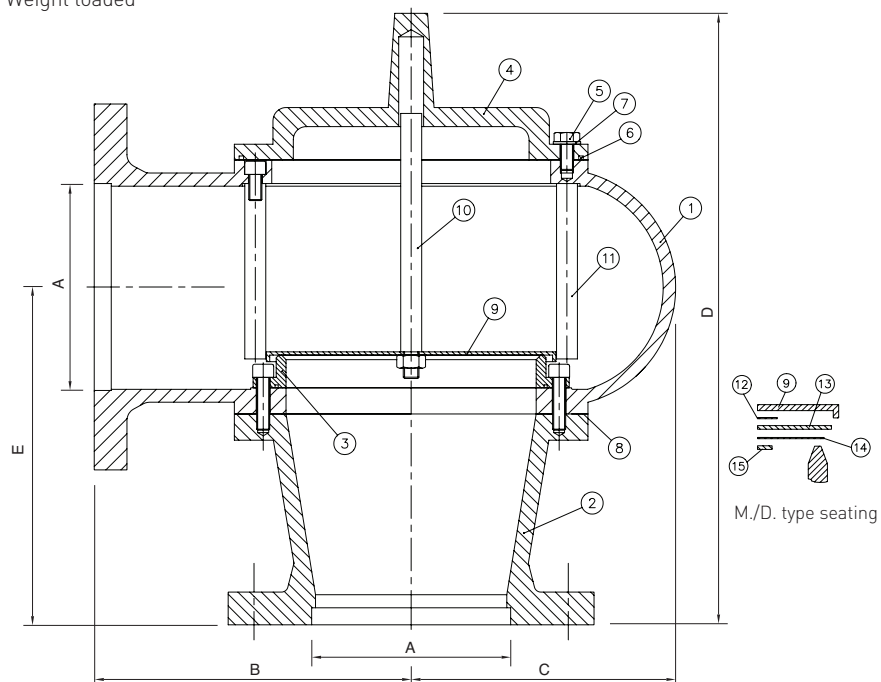


# ANDERSON GREENWOOD WHESSOE 4142A PRESSURE OR VACUUM RELIEF VALVE

## DIMENSIONS AND WEIGHTS

### 4142A PRESSURE OR VACUUM RELIEF VALVE

Weight loaded



### PARTS LIST

Item	Description	Alum spec.	C.Steel	SS spec
1	Valve body	Aluminum	WCB	316 SS
2	Valve base	Aluminum	WCB	316 SS
3	Removable seat	Aluminum	316 SS	316 SS
4	Valve cover	Aluminum	WCB	316 SS
5	Cover screw	ZP Steel	ZP Steel	18/8 SS
6	O -ring seal	Nitrile	Nitrile	Nitrile
7	Sealing washers	G fiber	G fiber	G fiber
8	Body joint	Non-asbestos	Non-asbestos	Non-asbestos
9	Pallet	316 SS	316 SS	316 SS
10	Pallet stem	316 SS	316 SS	316 SS
11	Pallet guide posts	316 SS	316 SS	316 SS
12	Spacer disc	Non-asbestos	Non-asbestos	Non-asbestos
13	Diaphragm supp.disc	Non-asbestos	Non-asbestos	Non-asbestos
14	Diaphragm	PTFE	PTFE	PTFE
15	Diaphragm supp.disc	316 SS	316 SS	316 SS

### DIMENSIONS

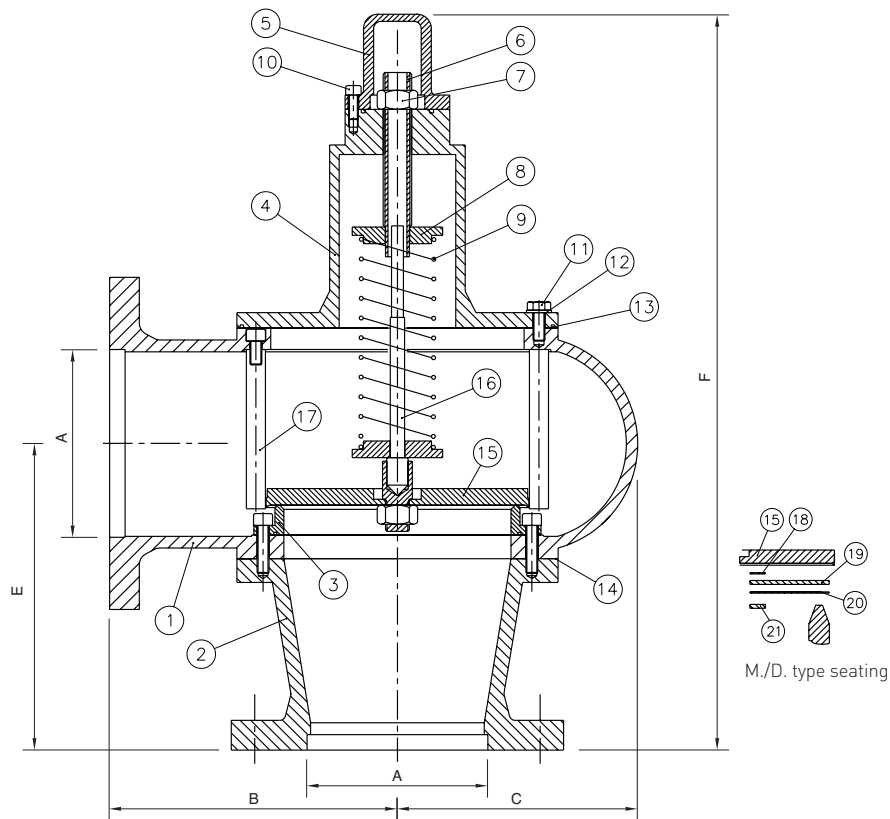
Nominal size DN	50	75	100	150	200	250	300
Nominal size in	2	3	4	6	8	10	12
A	51	76	101	152	203	254	305
B	140	180	230	242	310	358	393
C	105	140	162	202	237	280	326
D	308	370	424	483	557	640	694
E	142	184	212	274	329	377	397
F	472	518	563	635	696	810	845

### 4142A PRESSURE OR VACUUM RELIEF VALVE WEIGHT LOADED - WEIGHTS kg

	2"	3"	4"	6"	8"	10"	12"
Aluminum	6	9	14	24	36	55	72
Steel/St.St.	16	24	37	65	99	144	196

# ANDERSON GREENWOOD WHESSOE 4142A PRESSURE OR VACUUM RELIEF VALVE

4142A PRESSURE OR VACUUM RELIEF VALVE  
Spring loaded



## PARTS LIST

Item	Description	Alum spec	C.Steel	SS spec
1	Valve body	Aluminum	WCB	316 SS
2	Valve base	Aluminum	WCB	316 SS
3	Removable seat	Aluminum	316 SS	316 SS
4	Spring bonnet	Aluminum	WCB	316 SS
5	Bonnet cap	Aluminum	WCB	316 SS
6	Adjustment screw	316 SS	316 SS	316 SS
7	Locknut	18/8 SS	18/8 SS	18/8 SS
8	Spring washers	316 SS	316 SS	316 SS
9	Spring	316 SS	316 SS	316 SS
10	Cap screws	ZP Steel	ZP Steel	18/8 SS
11	Bonnet screws	ZP Steel	ZP Steel	18/8 SS
12	Sealing washers	G fiber	G fiber	G fiber
13	O -ring seal	Nitrile	Nitrile	Nitrile
14	Base/body joint	Non-asbestos	Non-asbestos	Non-asbestos
15	Pallet	316 SS	316 SS	316 SS
16	Pallet stem	316 SS	316 SS	316 SS
17	Pallet guide post	316 SS	316 SS	316 SS
18	Spacer disc	Non-asbestos	Non-asbestos	Non-asbestos
19	Diaphragm back.disc	Non-asbestos	Non-asbestos	Non-asbestos
20	Diaphragm	PTFE	PTFE	PTFE
21	Diaphragm supp.disc	316 SS	316 SS	316 SS

## 4142A PRESSURE OR VACUUM RELIEF VALVE SPRING LOADED - WEIGHTS kg

	2"	3"	4"	6"	8"	10"	12"
Aluminum	8	11	16	25	37	62	80
Steel/St.St.	22	31	47	78	114	176	234

# ANDERSON GREENWOOD WHESSOE 4142A PRESSURE OR VACUUM RELIEF VALVE

## 4142A WEIGHT LOADED PRESSURE OR VACUUM VALVE FLOW FIGURES

Set pressure mbar	2"			3"			4"			6"			8"			10"			12"		
	Over pressure			Over pressure			Over pressure			Over pressure			Over pressure			Over pressure			Over pressure		
	20%	35%	50%	20%	35%	50%	20%	35%	50%	20%	35%	50%	20%	35%	50%	20%	35%	50%	20%	35%	50%
2.5	38	52	72	84	116	161	150	206	286	338	464	644	601	825	1146	939	1289	1790	1352	1856	2577
10	75	103	143	169	232	322	300	412	573	676	928	1289	1202	1650	2291	1877	2578	3580	2704	3712	5155
25	119	163	226	267	367	509	475	652	906	1069	1467	2038	1900	2608	3622	2969	4076	5660	4275	5869	8151
50	168	231	320	378	519	720	672	922	1281	1511	2075	2882	2687	3689	5123	4198	5764	8005	6045	8300	11527
60	184	253	351	414	568	789	736	1010	1403	1656	2273	3157	2943	4041	5612	4599	6314	8769	6622	9092	12627

Flow in m<sup>3</sup>/hr

## 4142A SPRING LOADED PRESSURE OR VACUUM VALVE FLOW FIGURES

Set pressure mbar	2"			3"			4"			6"			8"			10"			12"		
	Over pressure			Over pressure			Over pressure			Over pressure			Over pressure			Over pressure			Over pressure		
	20%	35%	50%	20%	35%	50%	20%	35%	50%	20%	35%	50%	20%	35%	50%	20%	35%	50%	20%	35%	50%
150	185	255	316	417	575	712	741	1022	1266	1666	2299	2848	2963	4086	5064	4629	6385	7912	6666	9194	11393
250	239	330	409	539	743	921	957	1321	1636	2154	2971	3682	3830	5282	6546	5984	8254	10228	8617	11885	14728
500	339	467	579	762	1051	1302	1354	1868	2314	3047	4202	5207	5416	7470	9257	8463	11673	14464	12187	16808	20829
750	414	571	708	932	1286	1593	1657	2286	2833	3729	5143	6373	6629	9143	11330	10358	14286	17703	14915	20572	25493

Flow in m<sup>3</sup>/hr

## 4142A SPRING LOADED PRESSURE RELIEF VALVE FLOW FIGURES

Set pressure mbar	2"			3"			4"			6"			8"			10"			12"		
	Over pressure			Over pressure			Over pressure			Over pressure			Over pressure			Over pressure			Over pressure		
	20%	35%	50%	20%	35%	50%	20%	35%	50%	20%	35%	50%	20%	35%	50%	20%	35%	50%	20%	35%	50%
1000	480	662	820	1079	1489	1845	1919	2646	3279	4317	5955	7379	7675	10589	13118	11992	13541	20497	17269	23818	29515
1500	587	810	1004	1332	1823	2259	2350	3241	4017	5289	7293	9037	9400	12965	16066	14687	20258	25103	21150	29172	36149
2000	678	936	1159	1526	2105	2609	2714	3743	4638	6105	8421	10435	10854	14971	18551	16960	23392	28987	24422	33684	41741
2500	758	1046	1296	1707	2354	2917	3034	4184	5185	6826	9415	11667	12135	16738	20744	18951	26153	32408	27305	37660	46668
3000	831	1146	1420	1869	2578	3195	3323	4584	5680	7478	10314	12780	13294	18335	22721	20771	28649	35501	29911	41255	51122
3500	987	1238	1534	2019	2785	3451	3590	4951	6135	8077	11140	13804	14359	19805	24541	22436	30946	38346	32307	44560	55218

Flow in m<sup>3</sup>/hr

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