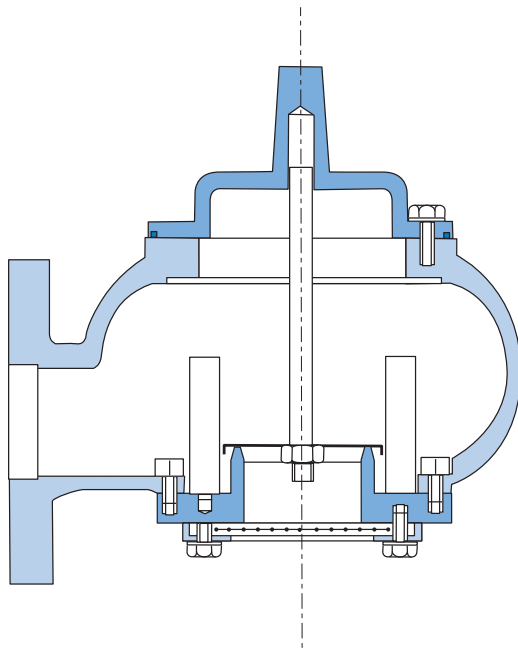




## ANDERSON GREENWOOD MARVAC SERIES 400 VACUUM RELIEF VALVES

Weight or spring loaded valves with a side inlet capable of effective vacuum relief



### FEATURES

- Weight or spring loaded models available.
- Choice of body materials.
- Modular design enables all components to be removed and replaced in-situ for quicker, simpler maintenance.
- Optional 'all-weather' coating prevents frozen condensate build-up and sticking of vital components in cold weather applications.
- ANSI and DIN flanges.

### GENERAL APPLICATION

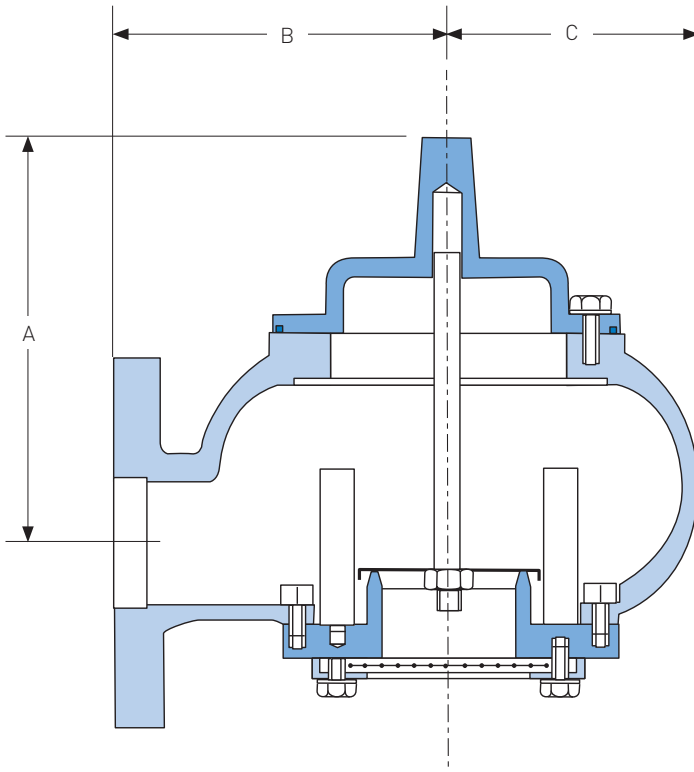
Model 401 and 451 valves provide vacuum relief to protect tanks from damage or deformation in storage tank farms, oil and gas production, the petroleum, pharmaceutical and chemical sectors.

### TECHNICAL DATA

Materials:	Aluminum, carbon steel, stainless steel
Sizes:	2" to 16" (DN 50 to 400)
Vacuum settings	
Weight loaded:	2.5 to 60 mbarg
Spring loaded:	60 to 800 mbarg
Certification:	ATEX 94/9 EC; GOST-R

# ANDERSON GREENWOOD MARVAC SERIES 400 VACUUM RELIEF VALVES

401



### MODEL 401 DIMENSIONS

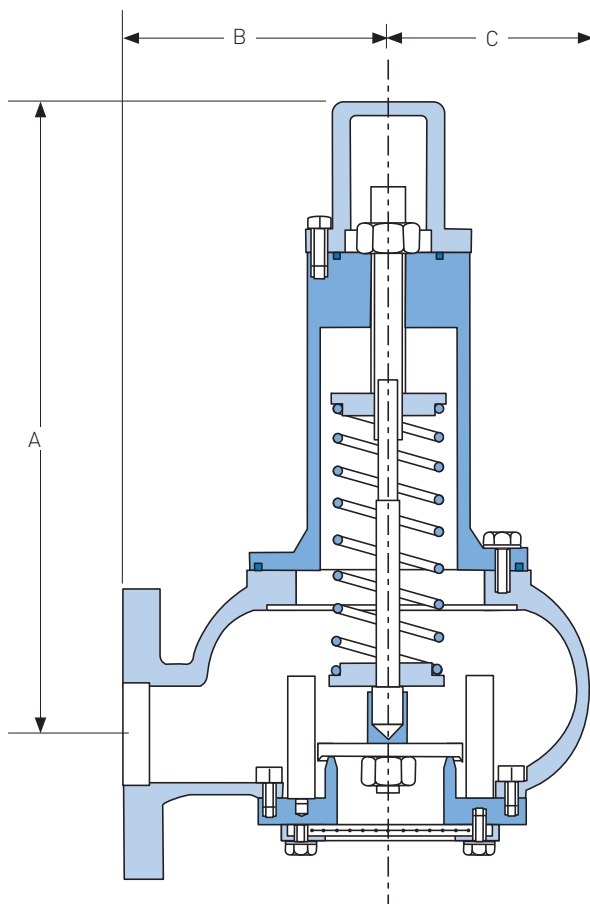
Nominal size DN	50	80	100	150	200	250	300	400
Nominal size NPS	2	3	4	6	8	10	12	16
A	166	179	202	200	217	230	300	417
B	140	180	200	242	310	358	393	510
C	105	140	162	202	237	280	326	417

### MODEL 401 WEIGHTS IN KGS

Nominal size DN	50	80	100	150	200	250	300	400
Nominal size NPS	2	3	4	6	8	10	12	16
Aluminum	4	6	10	17	26	39	51	110
CS/SS	11	22	35	48	72	101	135	420

# ANDERSON GREENWOOD MARVAC SERIES 400 VACUUM RELIEF VALVES

451



### MODEL 451 DIMENSIONS

Nominal size DN	50	80	100	150	200	250	300	400
Nominal size NPS	2	3	4	6	8	10	12	16
A	330	334	351	361	361	418	435	435
B	140	180	200	242	310	358	393	510
C	105	140	162	202	237	280	326	417

### MODEL 451 WEIGHTS IN KGS

Nominal size DN	50	80	100	150	200	250	300	400
Nominal size NPS	2	3	4	6	8	10	12	16
Aluminum	9	11	16	32	41	59	71	140
CS/SS	17	42	55	83	107	137	200	480

# ANDERSON GREENWOOD MARVAC SERIES 400 VACUUM RELIEF VALVES

## FLOW CAPACITIES

### 401 WEIGHT LOADED VACUUM FLOW FIGURES

Set pressure mbarg	DN 50 (2")		DN 80 (3")		DN 100 (4")		DN 150 (6")		DN 200 (8")		DN 250 (10")		DN 300 (12")		DN 400 (16")	
	Over pressure		Over pressure		Over pressure		Over pressure		Over pressure		Over pressure		Over pressure		Over pressure	
	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%
2.5	45	64	101	145	180	257	404	578	719	1029	1124	1608	1618	2316	2877	4117
5	64	91	143	205	254	364	571	817	1017	1455	1589	2274	2288	3275	4068	5822
10	90	129	202	289	359	514	807	1155	1438	2058	2247	3215	3235	4630	5751	8231
20	127	182	286	409	508	727	1141	1633	2032	2909	3176	4545	4573	6545	8130	11635
30	156	223	350	501	622	890	1397	1999	2488	3561	3888	5564	5599	8012	9953	14243
40	179	257	404	578	718	1027	1612	2307	2872	4110	4487	6421	6462	9247	11488	16439
50	201	287	451	646	802	1148	1802	2578	3210	4592	5015	7176	7222	10333	12838	18370
60	220	314	494	707	879	1257	1973	2823	3514	5028	5491	7857	7907	11314	14058	20113

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

### 451 SPRING LOADED VACUUM FLOW FIGURES

Set pressure mbarg	DN 50 (2")		DN 80 (3")		DN 100 (4")		DN 150 (6")		DN 200 (8")		DN 250 (10")		DN 300 (12")		DN 400 (16")	
	Over pressure		Over pressure		Over pressure		Over pressure		Over pressure		Over pressure		Over pressure		Over pressure	
	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%	20%	40%
60	118	167	264	375	470	667	1058	1500	1880	2667	2938	4167	4230	6000	7520	N/A
70	127	180	285	405	507	720	1140	1616	2030	2879	3172	4498	4567	6478	8120	11516
80	136	192	305	433	542	769	1218	1727	2169	3076	3389	4807	4881	6921	8676	12305
90	144	204	323	459	575	815	1291	1831	2300	3261	3593	5096	5174	7338	9199	13045
100	151	215	341	483	606	859	1360	1929	2423	3436	3786	5369	5452	7731	9692	13744
200	213	302	480	680	853	1209	1916	2715	3412	4835	5332	7555	7678	10879	13649	19341
400	299	423	673	952	1196	1693	2687	3802	4786	6773	7478	10583	10769	15240	19144	27093
600	363	514	818	1156	1454	2055	3265	4615	5815	8220	9086	12844	13084	18496	23261	32881
800	416	588	937	1323	1666	2353	3741	5283	6664	9410	10413	14704	14994	21173	26657	37642

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

N/A = Not available

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