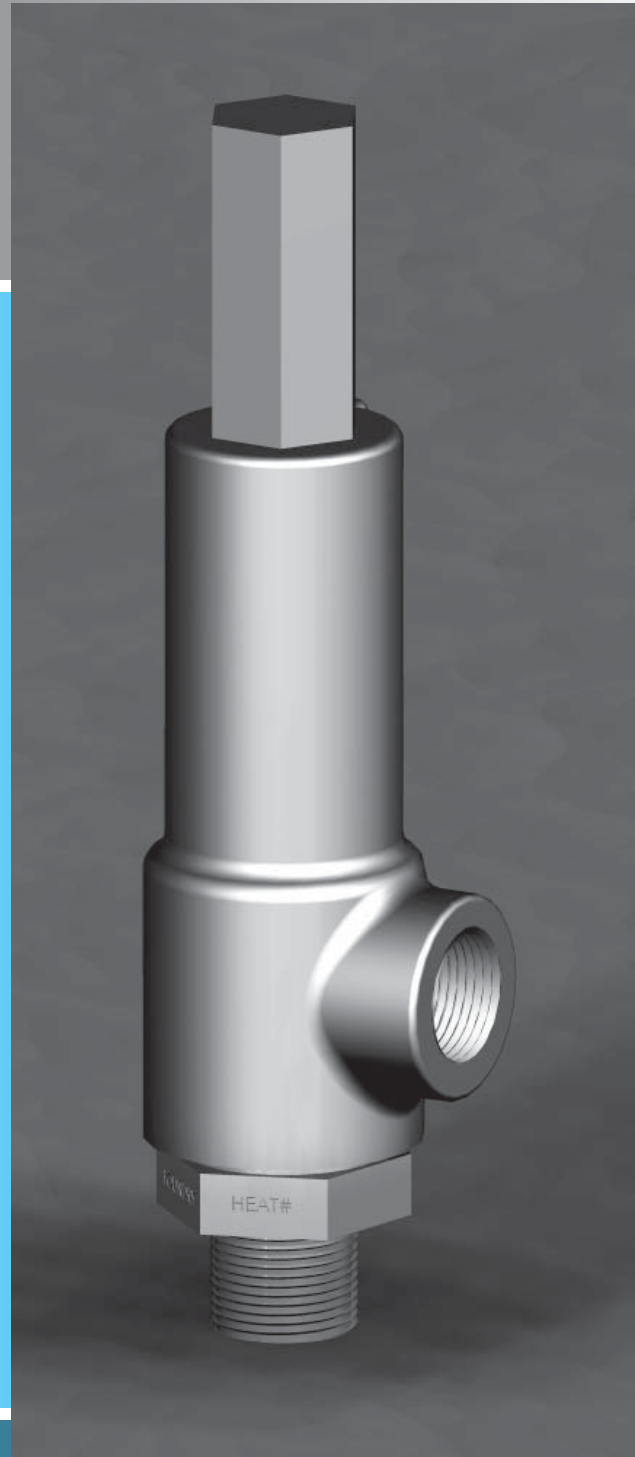


Series 1400 Screwed and Flanged Safety Relief Valves

- Flat-lapped seat with replaceable O-ring seal
- Manufactured in accordance with ASME Code Section VIII
- NBBI capacity certified for air/gas & liquid
- High flow capacities with low blowdown
- NACE and severe service options
- Temperature Range -60° F to 550° F
- Pressures from 5 PSIG to 2000 PSIG



Series 1400

Performance Under Pressure

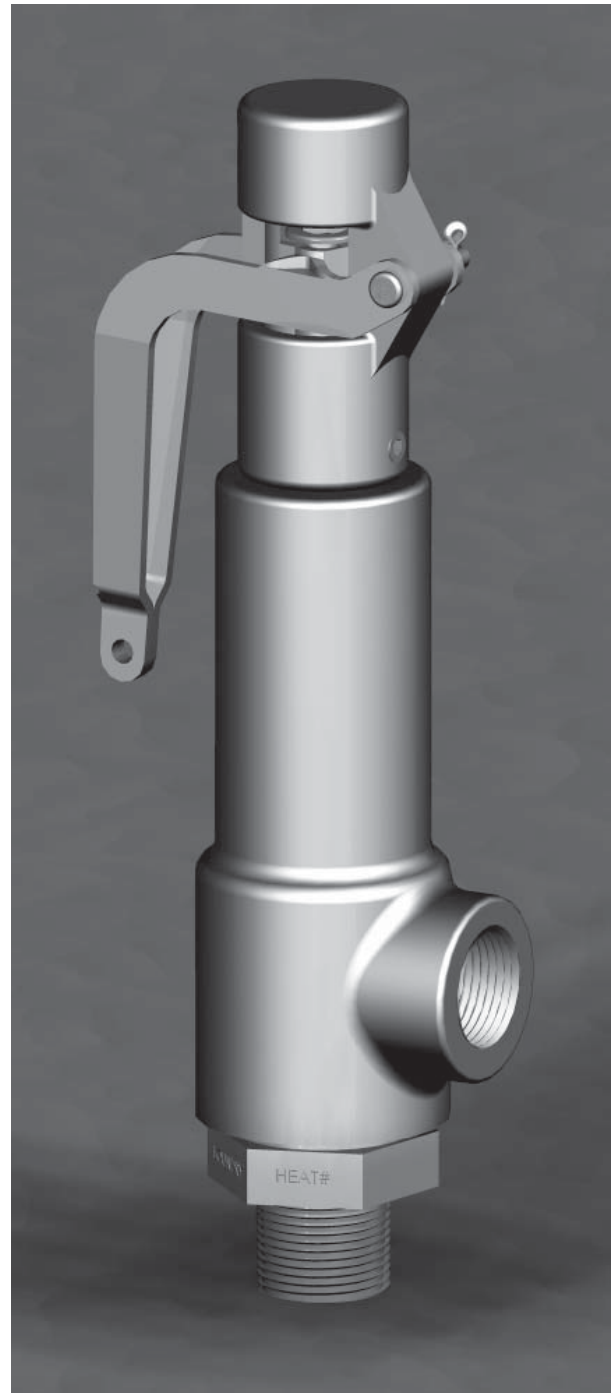
1400

Series 1400

Economy Safety Relief Valves

The Series 1400 is an economical safety relief valve that is ideal for OEMs, gas compressors, separators, heater treaters, scrubbers, dehydrators, gas production units, transmission and gathering lines, and similar applications. Despite its low cost, the Series 1400 is a high performance valve built with the quality you expect from Hydroseal. It is designed for high flow air, gas and liquid service and incorporates Hydroseal's replaceable **O-ring flat disc design** for premium seal tightness and ease of maintenance.

- Inlet sizes from 1/2" to 2" NPT & flanged
- Orifice areas of 0.058 to 0.830 square inches available
- NBBI capacity certified for air/gas and liquids, ASME "UV" Code stamped
- Temperature range -60° F to 550° F
- Replaceable O-ring seat seal for bubble tight service
- Flat lapped seat and disc
- Low blowdown
- High flow rates



Typical Service Applications

OEM Applications • Gas Compressors
Separators • Heater Treaters
Dehydrators • Gas Production Units
Scrubbers • Transmission & Gathering Lines

Nomenclature

Series	Orifice (sq. in.)	Inlet x Outlet	A Dim.	B Dim.	C Dim.	Weight (approx.)	Connection	Connection Facing	Seat O-rings	Material	Cap
14	E 0.243	2 3/4" x 1"	3-1/4"	1-7/8"	11-4/16"	8 lb	M M x F F F x F	0 NPT 1 RF x RF	V Fluorocarbon (Viton®) N Nitrile (Buna-N) E EPDM K Kalrez®	0 Standard 2 NACE 3 Stainless	0 Closed L Open Lever P Packed Lever
	E 0.243	3 1" x 1"	3-1/4"	1-7/8"	11-4/16"	8 lb	A 150 x 150 B 300 x 150 C 600 x 150				
	G 0.590	7 1-1/2" x 2"	4"	3-1/4"	18"	31 lb					
	G 0.590	8 2" x 2"	4"	3-1/4"	18"	31 lb					

Add "T" to part number for test port option. Increase "A" and "C" dimensions by 1/2"

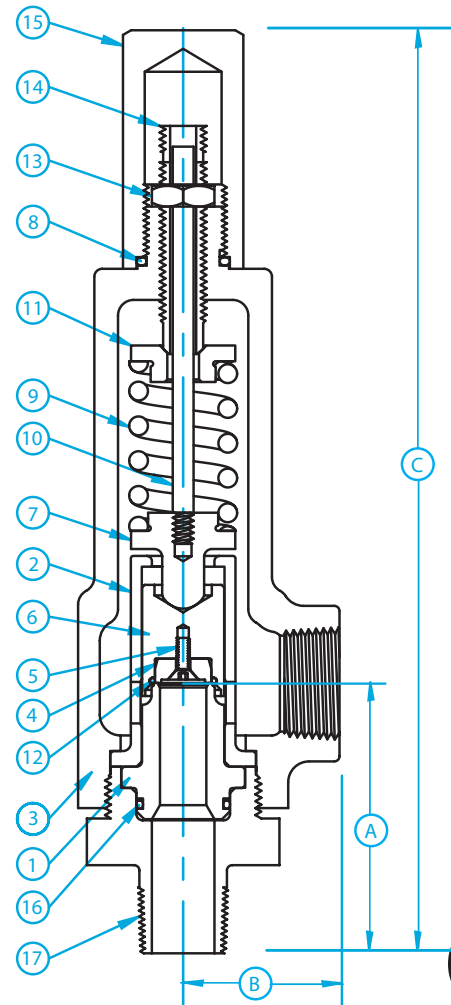
Materials

Item	Part Name	Standard	Nace	Stainless
1	Nozzle	316SS	316SS	316SS
2	Guide	316SS	316SS	316SS
3	Body	WCB	WCB	CF8M
4	Disc	316SS	316SS	316SS
5	Disc Screw	316SS	316SS	316SS
6	Disc Holder	316SS	316SS	316SS
7	Stem Head	316SS	316SS	316SS
8	Cap Seal	Specify	Specify	Specify
9	Spring	SS	Inconel	316SS
10	Stem	316SS	316SS	316SS
11	Spring Plate	CS	316SS	316SS
12	Seat O-ring	Specify	Specify	Specify
13	Adjusting Nut	CS	316SS	316SS
14	Adjusting Screw	CS	316SS	316SS
15	Cap	CS	CS	316SS
16	Nozzle Seal	Specify	Specify	Specify
17	Base	CS	316SS	316SS
18	Tag	316SS	316SS	316SS

WCB - ASME SA 216 CF8M - ASME SA 351 Carbon Steel - ASTM A105

O-Ring Materials

Material	Symbol	Temperature Limits °F	Temperature Limits °C
Fluorocarbon (Viton®)	V	- 15 to 400	- 26 to 205
Nitrile (Buna N)	N	- 65 to 225	- 54 to 107
EPDM	E	- 70 to 300	- 57 to 149
Kalrez®	K	- 30 to 550	- 1 to 288



Series 1400 Capacities

SET PRESSURE PSIG	AIR CAPACITY		GAS CAPACITY .6 SPG		WATER CAPACITY	
	E Orifice 0.243 sq. in.	G Orifice 0.590 sq. in.	E Orifice 0.243 sq. in.	G Orifice 0.590 sq. in.	E Orifice 0.243 sq. in.	G Orifice 0.590 sq. in.
15	64	308	82	397	22	64
25	99	402	128	518	27	80
50	247	656	318	846	38	112
75	344	915	444	1180	46	137
100	441	1173	569	1514	54	158
125	538	1432	695	1847	60	177
150	636	1691	820	2181	66	194
175	733	1950	946	2515	71	209
200	830	2208	1071	2849	76	223
225	928	2467	1197	3183	81	237
250	1025	2726	1322	3516	85	250
275	1122	2985	1448	3850	89	262
300	1220	3243	1573	4184	93	274
325	1317	3502	1699	4518	97	285
350	1414	3761	1824	4852	100	296
375	1511	4020	1950	5185	104	306
400	1609	4278	2075	5519	107	316
425	1706	4537	2201	5853	111	326
450	1803	4796	2326	6187	114	335
475	1901	5055	2452	6521	117	344
500	1998	5313	2577	6854	120	353
550	2192	5831	2828	7522	126	371
600	2387	6348	3079	8190	131	387
650	2582	6866	3330	8857	137	403
700	2776	7383	3581	9525	142	418
750	2971	7901	3832	10192	147	433
800	3165	8419	4083	10860	152	447
850	3360	8936	4334	11527	156	461
900	3555	9454	4585	12195	161	474
950	3749	9971	4836	12863	165	487
1000	3944	10489	5088	13530	170	500
1050	4138	11006	5339	14198	174	512
1100	4333	11524	5590	14865	178	524
1150	4528	12041	5841	15533	182	536
1200	4722	12559	6092	16201	186	547
1250	4917	13076	6343	16868	190	559
1300	5111	13594	6594	17536	194	570
1350	5306	14111	6845	18203	197	581
1400	5501	14629	7096	18871	201	591
1450	5695	15146	7347	19539	204	602
1500	5890	15664	7598	20206	208	612
1600	6279	-	8100	-	215	-
1700	6668	-	8602	-	221	-
1800	7057	-	9104	-	228	-
1900	7446	-	9606	-	234	-
2000	7836	-	10108	-	240	-

For other flow rates, refer to 1500 Series



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