



TYPE RXSO-S

0 to 400 psig

A CIRCOR CRYOGENICS COMPANY

Rockwood Swendeman®

STAINLESS STEEL SAFETY RELIEF VALVE

Technical Data

Operating Ranges

Temperature-423°F to +400°F

Set Pressuresto 400 psig

Materials of Construction

ShellInvestment Cast 316SS,
A.S.M.E SA-351

BaseInvestment Cast 316SS,
A.S.M.E SA-351

Trim316SS, A.S.M.E. SA-479

SpringStainless Steel
17-7 PH A.S.T.M.,
A-313, Type 631

Tests

Each valve is set, tested, retested and sealed at the factory to the customer's specifications.

Sizes

Inlet - 1/2 inch to 1 inch

Outlet - 3/4 inch to 1-1/4 inch

Applicable Codes

Designed and manufactured to meet:

- CGA S-1.2 and S-1.3.
- V-4301 (Cryogenic Non-Oxygen)
- V-4401 (Oxygen)
- ASME sec.VIII
- API 527
- AD-Merkblatt A2
- CRN OG0591.9

Features

- Special Teflon® seat, making bubble-tight seals possible to over 90% of set pressures per spec API 527; not applicable to steam.
- Adjustable blowdown ring
- Cleaned and packaged for use in O₂ service in compliance with the CGA specification G-4.1
 - Additional cleaning specifications:
 - 4WPI-SW70003
 - ES.660.503
 - GS-38
 - GS-40
- Electropolishing of base and proper assembly for high purity and electronic applications

Application

- Especially recommended where corrosive or expensive gases benefit from stainless steel construction.
- Stationary Cryogenic storage tanks
- Dual Safety relief systems
- Overpressure relief of tanks, pipelines, vessels, pumps
- Air and gas compressors

Options

- Large and Extra Large Capacity
Consult factory for flow rates
- BSP threads are available on most sizes.
- Lever operation

Type RXSO-S

Dimensions & Characteristics

AIR CAPACITY TABLE

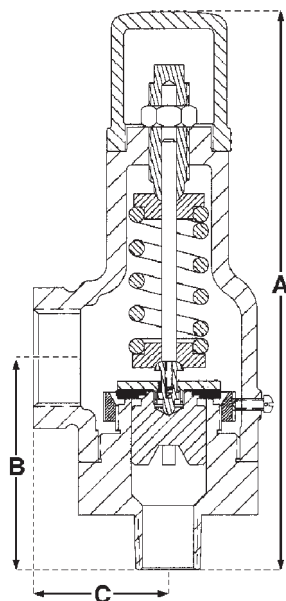
Discharge capacities in cubic feet per minute of air at 10% or 3 PSI, whichever is greater, overpressure.

Inlet Sizes		
Inches	1/2	3/4
Outlet Sizes	3/4	1-1/4
Inches	1	1-1/4
Seat Diameter	A	B
Inches	0.750	1.000
Flow Area	0.118	0.204
Set Pressure		
10	36	63
15	43	74
20	48	85
25	55	96
30	62	108
35	70	120
40	77	133
45	84	145
50	91	157
55	98	170
60	105	182
65	113	195
70	120	207
75	127	220
80	134	232
85	141	244
90	149	257
95	156	269
100	163	282
105	170	294
110	177	307
115	184	319
120	192	331
125	199	344
130	206	356
135	213	369

Inlet Sizes		
Inches	1/2	3/4
Outlet Sizes	3/4	1-1/4
Inches	1	1-1/4
Seat Diameter	A	B
Inches	0.750	1.000
Flow Area	0.118	0.204
Set Pressure		
140	220	381
145	228	393
150	235	406
155	242	418
160	249	431
165	256	443
170	264	456
175	271	468
180	278	480
185	285	493
190	292	505
195	299	518
200	307	530
205	314	543
210	321	555
215	328	567
220	335	580
225	343	592
230	350	605
235	357	617
240	364	629
245	371	642
250	378	654
255	386	667
260	393	679
265	400	692

Inlet Sizes		
Inches	1/2	3/4
Outlet Sizes	3/4	1-1/4
Inches	1	1-1/4
Seat Diameter	A	B
Inches	0.750	1.000
Flow Area	0.118	0.204
Set Pressure		
270	407	704
275	414	716
280	422	729
285	429	741
290	436	754
295	443	766
300	450	779
305	458	791
310	465	803
315	472	816
320	479	828
325	486	841
330	493	853
335	501	866
340	508	878
345	515	890
350	522	903
355	529	915
360	537	928
365	544	940
370	551	952
375	558	965
380	565	977
385	590	989
390	580	1002
395	587	1015
400	594	1027

Note: Pressure Settings below 15psig (1.034 barg) are non code.



DIMENSIONS & WEIGHTS

RXSO-S	Inlet (in)	Orifice	Outlet (in)	Max P (psi)	A Overall Height	B Outlet Height	C Outlet Width	Weight (lb)
76**ACD	0.5	A	0.75	400	5.78	2.44	1.34	2
76**ACE	0.5	A	1	400	6.41	2.69	1.69	3
76**ADD	0.75	A	0.75	400	5.905	2.565	1.34	2
76**ADE	0.75	A	1	400	6.535	2.815	1.69	3
76**BCF	0.5	B	1.25	400	7.492	2.992	1.88	3
76**BDF	0.75	B	1.25	400	7.492	2.992	1.88	4
76**BEF	1	B	1.25	400	7.492	2.992	1.88	5

NOTE: Codes used for 760 and 765 series

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