

# 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 Pressures .....to 400 psig

### Materials of Construction

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

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

Trim .....316SS, A.S.M.E. SA-479

Spring .....Stainless 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 O<sub>2</sub> 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

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## Dimensions & Characteristics

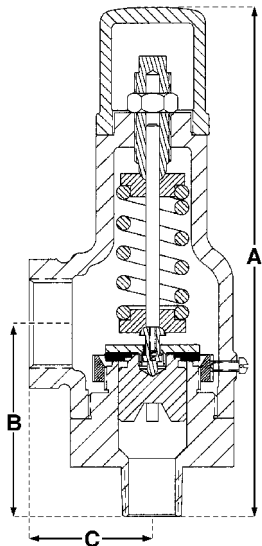
### AIR CAPACITY TABLE

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 Inches		3/4	1
Seat Diameter Inches		A	B
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 Inches		3/4	1
Seat Diameter Inches		A	B
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 Inches		3/4	1
Seat Diameter Inches		A	B
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	572	989	
390	580	1002	
395	587	1015	
400	594	1027	



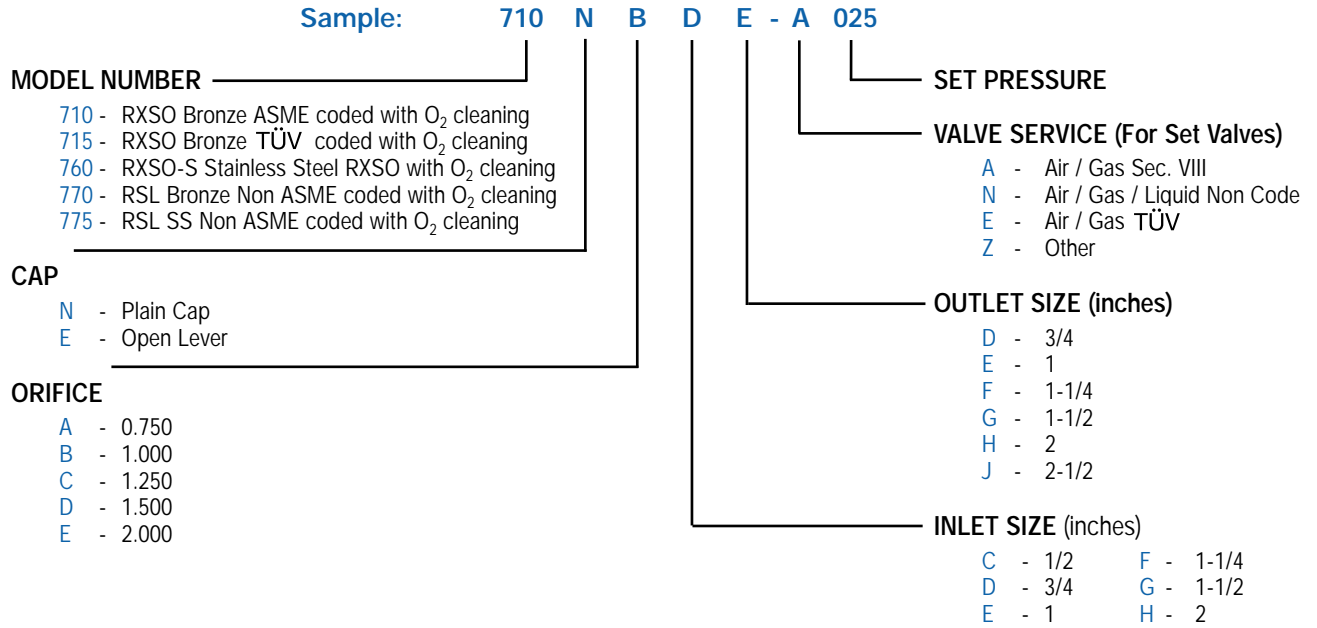
### DIMENSIONS & WEIGHTS

Inlet	Outlet	A	B	C	Weight	Max Psi
1/2	3/4	5 15/16	2 21/32	1 1/16	2 lbs.	max 400psi
1/2	1	6 9/16	2 29/32	1 1/16	3 lbs.	max 400 psi
3/4	3/4	6 3/16	2 9/16	1 1/16	2 lbs.	max 150 psi
3/4	1	6 9/16	2 29/32	1 1/16	3 lbs.	max 400 psi
1	1 1/4	7 13/16	3 1/2	1 13/16	5 lbs.	max 400 psi

TO ORDER: See Page 14

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**How To Order**



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