



FIGURE 710 SERIES RXSO BRONZE

SIZES 1/2" - 2"
PRESSURES to 400 psig at 400°F

APPLICATION DATA

- Especially recommended where noxious or expensive liquids or gases place a premium on seal quality.
- Stationary Cryogenic storage tanks
- Dual Safety relief systems
- Overpressure relief of tanks, pipelines, vessels, pumps
- Air and gas compressors
- Corrosive industrial applications

APPLICABLE CODES

- V-4301 (Cryogenic Non-Oxygen)
- V-4401 (Oxygen)
- API 527
- CRN 0G0591.9C
- CGA S-1.2 and S-1.3.
- ASME sec.VIII, "UV"
- AD-Merkblatt A2
- PED

- **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**
- **PED certified**
- **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

OPTIONS

- Large and Extra Large Capacity (Consult factory for flow rates)
- BSP threads are available on most sizes
- Lever operation
- Test Reports available

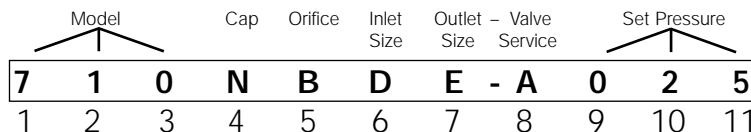
DIMENSIONS inches (mm) AND WEIGHTS pounds (kg)

Inlet	Orifice	Outlet	Part #	Max Psi	Dimensions			Wt.
					A	B	C	
1/2 (15)	A	3/4 (20)	710NACD	400 (27.6)	5 7/8 (150)	2 1/8 (65)	1 1/8 (34)	2 (.91)
3/4 (20)	A	3/4 (20)	710NADD	400 (27.6)	5 7/8 (150)	2 1/8 (65)	1 1/8 (34)	2 (.91)
1/2 (15)	A	1 (25)	710NACE	400 (27.6)	6 1/2 (166)	2 3/8 (71)	1 11/16 (43)	3 (1.36)
3/4 (20)	A	1 (25)	710NADE	400 (27.6)	6 1/2 (166)	2 3/8 (71)	1 11/16 (43)	3 (1.36)
1/2 (15)	B	1 (25)	710NBCE	400 (27.6)	7 7/8 (188)	2 7/8 (74)	1 11/16 (42)	4 (1.82)
3/4 (20)	B	1 (25)	710NBDE	400 (27.6)	7 7/8 (188)	2 7/8 (74)	1 11/16 (42)	4 (1.82)
1 (25)	B	1 (25)	710NBEE	400 (27.6)	7 7/8 (188)	2 7/8 (74)	1 11/16 (42)	4 (1.82)
1/2 (25)	B	1 1/4 (32)	710NBCF	400 (27.6)	7 7/8 (190)	3 (76)	1 7/8 (48)	5 (2.27)
3/4 (20)	B	1 1/4 (32)	710NBDF	400 (27.6)	7 7/8 (190)	3 (76)	1 7/8 (48)	5 (2.27)
1 (25)	B	1 1/4 (32)	710NBEF	400 (27.6)	7 7/8 (190)	3 (76)	1 7/8 (48)	5 (2.27)
3/4 (20)	C	1 1/4 (32)	710NCDF	300 (20.7)	8 11/16 (220)	3 1/2 (90)	2 1/4 (57)	6 (2.72)
1 (25)	C	1 1/4 (32)	710NCEF	300 (20.7)	8 7/8 (220)	3 1/2 (89)	2 1/4 (57)	6 (2.72)
1 1/4 (32)	C	1 1/4 (32)	710NCFF	300 (20.7)	8 7/8 (220)	3 1/2 (89)	2 1/4 (57)	6 (2.72)

Inlet	Orifice	Outlet	Part #	Max Psi	Dimensions			Wt.
					A	B	C	
3/4 (20)	C	1 1/2 (40)	710NCDG	400 (27.6)	9 7/8 (251)	3 3/8 (91)	2 7/8 (66)	7 (3.18)
1 (25)	C	1 1/2 (40)	710NCEG	400 (27.6)	9 7/8 (251)	3 3/8 (91)	2 7/8 (66)	7 (3.18)
1 1/4 (32)	C	1 1/2 (40)	710NCFG	400 (27.6)	9 7/8 (251)	3 3/8 (91)	2 7/8 (66)	7 (3.18)
1 (25)	D	1 1/2 (40)	710NDEG	350 (24.1)	9 13/16 (250)	3 3/8 (90)	2 7/8 (66)	7 (3.18)
1 1/4 (32)	D	1 1/2 (40)	710NDFG	350 (24.1)	9 13/16 (250)	3 3/8 (90)	2 7/8 (66)	7 (3.18)
1 1/2 (40)	D	1 1/2 (40)	710NDGG	350 (24.1)	9 13/16 (250)	3 3/8 (90)	2 7/8 (66)	7 (3.18)
1 (25)	D	2 (50)	710NDEH	400 (27.6)	9 11/16 (246)	3 11/16 (94)	2 3/4 (70)	8 (3.63)
1 1/4 (32)	D	2 (50)	710NDFH	400 (27.6)	9 11/16 (246)	3 11/16 (94)	2 3/4 (70)	8 (3.63)
1 1/2 (40)	D	2 (50)	710NDGH	400 (27.6)	9 11/16 (246)	3 11/16 (94)	2 3/4 (70)	8 (3.63)
1 1/2 (40)	E	2 (50)	710NEGH	400 (27.6)	9 11/16 (247)	3 11/16 (94)	2 7/8 (70)	9 (4.09)
2 (50)	E	2 (50)	710NEHH	400 (27.6)	9 11/16 (246)	3 11/16 (94)	2 3/4 (70)	9 (4.09)
1 1/2 (40)	E	2 1/2 (65)	710NEGJ	400 (27.6)	9 11/16 (247)	4 (102)	2 5/8 (75)	10 (4.54)
2 (50)	E	2 1/2 (65)	710NEHJ	400 (27.6)	9 11/16 (246)	4 (102)	2 5/8 (75)	10 (4.54)

NOTE: 1. 715 (PED) Valve Combinations are the same as the 710's listed above.
2. For open lever, replace "N" in model number with "E".

CODE SELECTION CHART



Model - Position 1, 2 & 3 710 = Bronze ASME w/O ₂ cleaning 715 = Bronze PED w/O ₂ cleaning
Cap - Position 4 N = Plain Cap E = Open Lever

Orifice - Position 5 A B C D E

Inlet Size - Position 6 C = 1/2 D = 3/4 E = 1 F = 1 1/4 G = 1 1/2 H = 2

Outlet Size - Position 7 D = 3/4 E = 1 F = 1 1/4 G = 1 1/2 J = 2 1/2

Valve Service - Position 8 A = Air/Gas Sect. VIII E = Air / Gas PED Z = Other
Set Pressure - Position 9, 10 & 11 _ _ _ = Actual Setting

FIGURE 710/715
SERIES

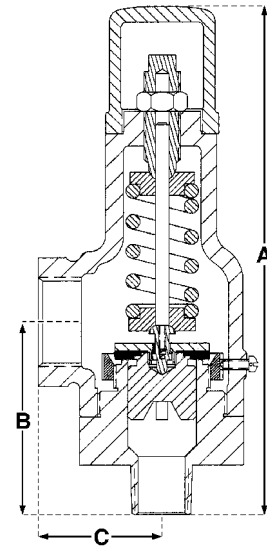
FIGURE 710 SERIES RXSO BRONZE

SPECIFICATION

The valve shall meet the ASME Section VIII code for air and gas services. It shall be "UV" National Board Certified. The valve shall have an adjustable blowdown ring. The valve shall have a Teflon(r) seat and conform to API 527. The valve shall be cleaned and packaged for use in Oxygen service in compliance with CGA specification G-4.1. The spring shall be of stainless steel.

MATERIALS OF CONSTRUCTION

ShellCast Bronze, ASME SB-62
 BaseForged Brass, Alloy C37700
 TrimCopper Alloy
 SpringStainless Steel
 17-7 PH ASTM, A-313, Type 631



MODELS

- 710 - Bronze ASME w/O₂ cleaning
- 715 - Bronze PED w/O₂ cleaning

AIR CAPACITY TABLE

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

Inlet Sizes Inches		1/2	3/4	1	1-1/4	1-1/2
Outlet Sizes		3/4	1	1-1/4	1-1/2	2
Seat Diameter		A	B	C	D	E
Flow Area		0.118	0.204	0.326	0.424	0.628
Set Pressure	10	36	63	100	130	193
	15	43	74	118	154	227
	20	48	85	136	177	262
	25	55	96	154	200	297
	30	62	108	172	224	332
	35	70	120	192	250	370
	40	77	133	212	276	408
	45	84	145	232	301	446
	50	91	157	252	327	485
	55	98	170	271	353	523
	60	105	182	291	379	561
	65	113	195	311	405	599
	70	120	207	331	430	638
	75	127	220	351	456	676
	80	134	232	371	482	714
	85	141	244	391	508	752
	90	149	257	410	534	791
	95	156	269	430	560	829
	100	163	282	450	585	867
	105	170	294	470	611	905
	110	177	307	490	637	944
	115	184	319	510	663	982
	120	192	331	530	689	1020
	125	199	344	549	715	1058
	130	206	356	569	740	1097
	135	213	369	589	766	1135
	140	220	381	609	792	1173
	145	228	393	629	818	1211
	150	235	406	649	844	1249
	155	242	418	668	869	1288
	160	249	431	688	895	1326
	165	256	443	708	921	1364
	170	264	456	728	947	1402
	175	271	468	748	973	1441
	180	278	480	768	999	1479
	185	285	493	788	1024	1517
	190	292	505	807	1050	1555
	195	299	518	827	1076	1594
	200	307	530	847	1102	1632
	205	314	543	867	1128	1670

Inlet Sizes Inches		1/2	3/4	1	1-1/4	1-1/2
Outlet Sizes		3/4	1	1-1/4	1-1/2	2
Seat Diameter		A	B	C	D	E
Flow Area		0.118	0.204	0.326	0.424	0.628
Set Pressure	210	321	555	887	1153	1708
	215	328	567	907	1179	1747
	220	335	580	927	1205	1785
	225	343	592	946	1231	1823
	230	350	605	966	1257	1861
	235	357	617	986	1283	1900
	240	364	629	1006	1308	1938
	245	371	642	1026	1334	1976
	250	378	654	1046	1360	2014
	255	386	667	1066	1386	2053
	260	393	679	1085	1412	2091
	265	400	692	1105	1437	2129
	270	407	704	1125	1463	2167
	275	414	716	1145	1489	2206
	280	422	729	1165	1515	2244
	285	429	741	1185	1541	2282
	290	436	754	1204	1567	2320
	295	443	766	1224	1592	2359
	300	450	779	1244	1618	2397
	305	458	791	1264	1644	2435
	310	465	803	1284	1670	2473
	315	472	816	1304	1696	2511
	320	479	828	1324	1721	2550
	325	486	841	1343	1747	2588
	330	493	853	1363	1773	2626
	335	501	866	1383	1799	2664
	340	508	878	1403	1825	2703
	345	515	890	1423	1851	2741
	350	522	903	1443	1876	2779
	355	529	915	1463	1902	2817
	360	537	928	1482	1928	2856
	365	544	940	1502	1954	2894
	370	551	952	1522	1980	2932
	375	558	965	1542	2005	2970
	380	565	977	1562	2031	3009
	385	590	989	1582	2057	3047
	390	580	1002	1602	2083	3085
	395	587	1015	1621	2109	3123
	400	594	1027	1641	2135	3162

FIGURE 710/715
SERIES