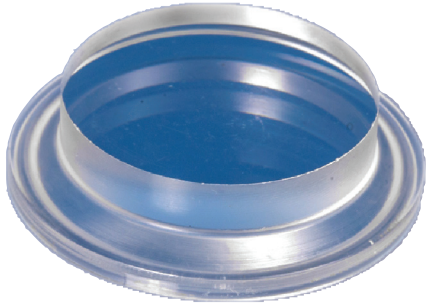


Sight Glass

Operating Conditions:

The pressure ratings in the above charts were calculated using procedures derived from engineering formulas published in Roark’s Formulas for Stress and Strain, 6th edition, McGraw hill. The charts show pressure ratings in PSIG for four types of acrylic sight glasses. The Design Stress, the Intermittent Load Stress and the Poisson’s Ratio we used as a basis for these calculations are those published by the manufacturer of the acrylic material. The stresses used are the maximum recommended such that “crazing due to stress alone will not occur for a very long time”. Note that the stress values employed are considerably lower than those published for the ultimate tensile strength of this material. Further, we have applied a safety factor of 2 in our calculation of pressure ratings. Finally, we have limited the rating to a maximum of 150 PSIG in those cases where the calculations yielded ratings in excess of that value.



Pressure Rating (PSIG) Constant Load Case

SIZE	Tri-Clamp 16AMPSPG	Bevel Seat 16ASG	Q-Line 16AQSG	I-Line 16AI-141SG	Tri-Clamp 16AMPSPG	Bevel Seat 16ASG	Q-Line 16AQSG	I-Line 16AI-141SG	Tri-Clamp 16AMPSPG	Bevel Seat 16ASG	Q-Line 16AQSG	I-Line 16AI-141SG	Tri-Clamp 16AMPSPG	Bevel Seat 16ASG	Q-Line 16AQSG	I-Line 16AI-141SG	Tri-Clamp 16AMPSPG	Bevel Seat 16ASG	Q-Line 16AQSG
	1 1/2"				2"				2 1/2"				3"				4"		
77°	150	150	59	150	94	135	85	85	64	1335	41	03	47	96	40	75	27	66	25
92°	131	150	51	130	82	117	74	74	56	1154	78	94	08	33	46	52	45	82	2
104°	121	150	47	120	75	108	68	68	51	1064	48	23	77	73	26	02	25	32	0
122°	111	150	43	110	69	99	63	63	47	97	40	76	34	70	29	55	20	49	18
140°	101	147	39	100	63	90	57	57	43	89	36	69	31	64	27	50	18	44	17
158°	81	118	32	80	50	72	46	46	34	71	29	55	25	51	21	40	15	35	13
176°	61	88	24	60	38	54	34	34	26	53	22	41	19	38	16	30	11	27	10
194°	30	44	12	30	19	27	17	17	13	27	11	21	91	98		15	51	3	

Sight Glass

Operating Conditions:

Thus, we feel that our rating offer a substantial margin of safety relative to the rupture strenght of the sight glasses. Nevertheless, because individual service conditions vary and because we have no control over individual service conditions vary and because we have no controlover individual applications ansd installations, we cannot guarantee the ratings in any particular use. While we hope the following data will serve as a useful guide-line to engineers, it is up to the user to determine suitability for a specific application. In particular, for hazardous service conditions, we strongly recommend that the user further derate the dight glasses. We also reccomend that, at a minimum, the user hydro statically test installations at the pressures at least twice the maximum service pressure. For unusual or demanding applications

Pressure Rating (PSIG) Intermittent Load Case

		Tri-Clamp 16AMP5G	Bevel Seat 16ASG	Q-Line 16AQ5G	I-Line 16AI-1415G	Tri-Clamp 16AMP5G	Bevel Seat 16ASG	Q-Line 16AQ5G	I-Line 16AI-1415G	Tri-Clamp 16AMP5G	Bevel Seat16ASG	Q-Line 16AQ5G	I-Line 16AI-1415G	Tri-Clamp 16AMP5G	Bevel Seat 16ASG	Q-Line 16AQ5G	I-Line 16AI-1415G	Tri-Clamp16AMP5G	Bevel Seat 16ASG	Q-Line 16AQ5G	I-Line 16AI-1415G
TEMPERATURE F°	SIZE	1 1/2"				2"				2 1/2 "3				"4				"			
	77°	150	150	118	150	150	150	150	150	129	150	1091	50	93	15	0	150	54	1335	09	5
	92°	150	150	79	150	126	150	114	114	86	150	73	1376	21	28	53	100	36	89	34	63
	104°	150	150	59	150	94	135	85	85	64	133	54	1034	79	64	07	52	76	62	54	8
	122°	111	150	43	110	69	99	63	63	47	97	40	76	34	70	29	55	20	49	18	35
	140°	101	147	39	100	63	90	57	57	43	89	36	693	16	42	75	01	84	41	73	2
	158°	81	118	32	80	50	72	46	46	34	71	29	55	25	51	21	40	15	35	13	25
	176°	61	88	24	60	38	54	34	34	26	53	22	41	19	38	16	30	11	27	10	19
	194°	30	44	12	30	19	27	17	17	13	27	11	21	91	98	08	15	51	35		10