THERMOWELLS: MAXIMUM ALLOWABLE WORKING PRESSURE

Van Stone/Lap Joint Thermowells
Straight and Stepped

MATERIAL		ORDER CODE	MAXIMUM ALLOWABLE WORKING PRESSURE - (MAWP)						TEMPERATURE RANGE			
			STRAIGHT				STEPPED					
			0.265" MAX BORE		0.390" MAX BORE		0.265" MAX BORE					
ASTM SPECIFICATION	TYPE/ TRADENAME		"Q" ≥ 3/4"		"Q" ≥ 7/8"		"V" ≥ 1/2"		C		F	
			@MIN TEMP	@MAX TEMP	@MIN TEMP	@MAX TEMP	@MIN TEMP	@MAX TEMP	MIN	MAX	MIN	MAX
A479 Gr. 304/304L	304/304L	09	8486 psi	3992 psi	7036 psi	3319 psi	5412 psi	2576 psi	-28 C	538 C	-20 F	1000 F
A479 Gr. 316/316L	316/316L	08	8301 psi	5908 psi	6912 psi	4931 psi	5331 psi	3827 psi	-28 C	538 C	-20 F	1000 F
A479 Gr. S34700	347	36	8301 psi	5908 psi	6912 psi	4931 psi	5331 psi	3827 psi	-28 C	538 C	-20 F	1000 F
A105	A105	61	9365 psi	5450 psi	7818 psi	4931 psi	6162 psi	3886 psi	-28 C	482 C	-20 F	900 F
B164 Gr. N04400	Alloy 400	27	7077 psi	3254 psi	5908 psi	2947 psi	4656 psi	2560 psi	-28 C	482 C	-20 F	900 F
B574 Gr. N10276	Alloy C276	29	10696 psi	6545 psi	8929 psi	5464 psi	7037 psi	4251 psi	-28 C	538 C	-20 F	1000 F
A182 Gr. F11 Cl. 2	F11 Cl. 2	60	9365 psi	5906 psi	7818 psi	4931 psi	6162 psi	3886 psi	-28 C	482 C	-20 F	900 F
A182 Gr. F22 Cl. 3	F22 Cl. 3	59	11900 psi	5906 psi	9809 psi	4931 psi	7566 psi	3886 psi	-28 C	482 C	-20 F	900 F
A182 Gr. F91	F91	91	15860 psi	5906 psi	13061 psi	4931 psi	10060 psi	3886 psi	-28 C	482 C	-20 F	900 F
B473 Gr. N08020	Alloy 20	38	9578 psi	6918 psi	7996 psi	5775 psi	6302 psi	4551 psi	-28 C	425 C	-20 F	800 F
B166 Gr. N06600	Alloy 600	03	7343 psi	1627 psi	6130 psi	1457 psi	4832 psi	1148 psi	-28 C	650 C	-20 F	1200 F
B408 Gr. N08800	Alloy 800	37	8195 psi	5641 psi	6841 psi	4709 psi	5392 psi	3711 psi	-28 C	593 C	-20 F	1100 F
A479 Gr. S31008	310S	04	8301 psi	5908 psi	6912 psi	4931 psi	5331 psi	3827 psi	-28 C	538 C	-20 F	1000 F
B166 Gr. N06601	Alloy 601	07	7343 psi	1745 psi	6130 psi	1457 psi	4831 psi	1148 psi	-28 C	650 C	-20 F	1200 F
B160 Gr. N02200	Nickel 200	31	3650 psi	3650 psi	3047 psi	3047 psi	2402 psi	2402 psi	-28 C	316 C	-20 F	600 F

- These tables are for reference only. Other design factors should be taken into consideration in addition to temperature and pressure, such as vibration, corrosion, and installation method.
- The MAWP for the sssembly of flange and shank shall not exceed the lesser value of the ASME B16.5 flange class and material or the MAWP of the shank from the above table.
- MAWP data for materials and temperatures not shown on this table is available upon request.

Van Stone/Lap Joint Thermowells
Tapered

MATERIAL		ORDER CODE	MAXIMUM ALLOWABLE WORKING PRESSURE - (MAWP)				TEMPERATURE RANGE			
			TAPERED							
			0.265" MAX BORE		0.390" MAX BORE					
ASTM SPECIFICATION	TYPE/ TRADENAME		"V" ≥ 5/8"		"V" ≥ 49/64"		C		F	
			@MIN TEMP	@MAX TEMP	@MIN TEMP	@MAX TEMP	MIN	MAX	MIN	MAX
A479 Gr. 304/304L	304/304L	09	7304 psi	3445 psi	5958 psi	2823 psi	-28 C	538 C	-20 F	1000 F
A479 Gr. 316/316L	316/316L	08	7176 psi	5118 psi	5853 psi	4209 psi	-28 C	538 C	-20 F	1000 F
A479 Gr. S34700	347	36	7176 psi	5118 psi	5853 psi	4209 psi	-28 C	538 C	-20 F	1000 F
A105	A105	61	8114 psi	5041 psi	6704 psi	4228 psi	-28 C	482 C	-20 F	900 F
B164 Gr. N04400	Alloy 400	27	6132 psi	3010 psi	5066 psi	2693 psi	-28 C	482 C	-20 F	900 F
B574 Gr. N10276	Alloy C276	29	9267 psi	5671 psi	7656 psi	4663 psi	-28 C	538 C	-20 F	1000 F
A182 Gr. F11 Cl. 2	F11 Cl. 2	60	8114 psi	5118 psi	6704 psi	4228 psi	-28 C	482 C	-20 F	900 F
A182 Gr. F22 Cl. 3	F22 Cl. 3	59	10183 psi	5118 psi	8307 psi	4228 psi	-28 C	482 C	-20 F	900 F
A182 Gr. F91	F91	91	13559 psi	5118 psi	11052 psi	4228 psi	-28 C	482 C	-20 F	900 F
B473 Gr. N08020	Alloy 20	38	8299 psi	5994 psi	6856 psi	4952 psi	-28 C	425 C	-20 F	800 F
B166 Gr. N06600	Alloy 600	03	6362 psi	1505 psi	5256 psi	1249 psi	-28 C	650 C	-20 F	1200 F
B408 Gr. N08800	Alloy 800	37	7100 psi	4887 psi	5866 psi	4037 psi	-28 C	593 C	-20 F	1100 F
A479 Gr. S31008	310S	04	7176 psi	5118 psi	5853 psi	4209 psi	-28 C	538 C	-20 F	1000 F
B166 Gr. N06601	Alloy 601	07	6362 psi	1512 psi	5256 psi	1249 psi	-28 C	650 C	-20 F	1200 F
B160 Gr. N02200	Nickel 200	31	3163 psi	3163 psi	2613 psi	2613 psi	-28 C	316 C	-20 F	600 F

- These tables are for reference only. Other design factors should be taken into consideration in addition to temperature and pressure, such as vibration, corrosion, and installation method.
- The MAWP for the sssembly of flange and shank shall not exceed the lesser value of the ASME B16.5 flange class and material or the MAWP of the shank from the above table.
- MAWP data for materials and temperatures not shown on this table is available upon request.