Flange Pressure Temperature Rating Table (ASME B16.5)

Basis: ASME B16.5 Table 2 1.1 (Group 1.1: A105 forgings, A216 WCB castings, A515 70, A516 70, A350 LF2). Ratings in bar gauge; linear interpolation between temperatures is allowed.

instrumentationblog.in/downloads/engineering-reference-tables/flange-pressure-temperature-rating-table/

Working pressure in bar g, Group 1.1

°C	Class 150	Class 300	Class 600	Class 900	Class 1500	Class 2500
−29 to 38	19.6	51.1	102.1	153.2	255.3	425.5
50	19.2	50.1	100.2	150.4	250.6	417.7
100	17.7	46.6	93.2	139.8	233.0	388.3
150	15.8	45.1	90.2	135.2	225.4	375.6
200	13.8	43.8	87.6	131.4	219.0	365.0
250	12.1	41.9	83.9	125.8	209.7	349.5
300	10.2	39.8	79.6	119.5	199.1	331.8
325	9.3	38.7	77.4	116.1	193.6	322.6
350	8.4	37.6	75.1	112.7	187.8	313.0
375	7.4	36.4	72.7	109.1	181.8	303.1
400	6.5	34.7	69.4	104.2	173.6	289.3
425	5.5	28.8	57.5	86.3	143.8	239.7
450	4.6	23.0	46.0	69.0	115.0	191.7
475	3.7	17.4	34.9	52.3	87.2	145.3
500	2.8	11.8	23.5	35.3	58.8	97.9
538	1.4	5.9	11.8	17.7	29.5	49.2

Approximate working pressure in psig (converted from bar)

°C	Class 150	Class 300	Class 600	Class 900	Class 1500	Class 2500
−29 to 38	284	741	1481	2222	3703	6171
50	278	727	1453	2181	3635	6058
100	257	676	1352	2028	3379	5632
150	229	654	1308	1961	3269	5448
200	200	635	1271	1906	3176	5294
250	175	608	1217	1825	3041	5069
300	148	577	1155	1733	2888	4812
325	135	561	1123	1684	2808	4679
350	122	545	1089	1635	2724	4540
375	107	528	1054	1582	2637	4396
400	94	503	1007	1511	2518	4196
425	80	418	834	1252	2086	3477
450	67	334	667	1001	1668	2780
475	54	252	506	759	1265	2107
500	41	171	341	512	853	1420
538	20	86	171	257	428	714

Notes

- Other material groups (for example stainless 2.1 or 2.2) have different ratings.
- Carbon steel above 425 °C is subject to graphitisation limits; check the standard notes.
- The psig table is converted from bar and may differ by a few psi from the US customary table.

Free download from instrumentationblog.in. Check values against the current edition of the standard for design work.