

KDS009 Pressure-Temperature Ratings for Carbon Steel Flanges to ASME B16.5

(The values shown are valid only for materials to ASTM A105; ASTM A181 Classes 60 and 70; ASTM A182-55T Gr-F1 and ASTM A350-LF2)

Temperature °C	Maximum Working Pressure (kPa)					
	PN20 (Class 150)	PN50 (Class 300)	PN100 (Class 600)	PN150 (Class 900)	PN250 (Class 1500)	PN420 (Class 2500)
-29 to 38	1960	5110	10210	15320	25530	42550
50	1920	5010	10020	15020	25040	41730
100	1770	4640	9280	13910	23190	38650
150	1580	4520	9050	13570	22610	37690
200	1400	4380	8760	13150	21910	36520
250	1210	4170	8340	12520	20860	34770
300	1020	3870	7750	11620	19370	32280
350	840	3700	7390	11090	18480	30800
375	740	3650	7290	10940	18230	30390
400	650	3450	6900	10350	17250	28750
425	560	2880	5750	8630	14380	23960
450	470	2000	4010	6010	10020	16690
475	370	1350	2710	4060	6770	11290
500	280	880	1760	2640	4400	7330
525	190	520	1040	1550	2590	4320
540	130	330	650	980	1630	2720

Notes:

- Forgings to ASTM A105 are not recommended for prolonged use above 427 °C (800 °F).
- Forgings to ASTM A350-LF2 are not to be used above 343 °C (650 °F).
- The table is applicable only to flanges up to DN600 as per ASME B16.5
- Care should be taken with regard to the selection of suitable bolts. Refer to the appropriate ASTM standards.