

SAE J514 Working Pressure Ratings Capable of 4 to 1 Minimum Burst

Note: In the case of a fitting that is a jump size, it is recommend that the lower pressure of the two ends must be recognized as the working pressure rating for that fitting. This is also the case if the fitting has one or more different style ends. For example, straight threads to pipe threads. In this case it is also recommended that the lower pressure rating of the two different style ends must be recognized as the working pressure rating for that fitting.

Nom SAE Dash Size	Nom Tube O.D. M.M.	Nom Tube O.D. Inch	Straight Thread Size	Nom Pipe Size	Rigid SAE St. Thread Unions & Bulkhead MPa	Rigid SAE St. Thread Unions & Bulkhead PSI	Adjustable SAE Std. Thread & Female Swivel MPa	Adjustable SAE Std. Thread & Female Swivel PSI	Fittings with Pipe Thread MPa	Fittings with Pipe Thread PSI	NPSM Std. Pipe Thread Maximum Operating Pressure MPa	NPSM Std. Pipe Thread Maximum Operating Pressure PSI
2	3.18	0.125	5/16-24	1/8	34.5	5,000	34.5	5,000	34.5	5,000	34.5	5,000
3	4.76	0.188	3/8-24	1/8	34.5	5,000	34.5	5,000	34.5	5,000	—	—
4	6.35	0.250	7/16-20	1/8	34.5	5,000	31.0	4,500	34.5	5,000	34.5	5,000
5	7.94	0.313	1/2-20	1/8	34.5	5,000	27.5	4,000	34.5	5,000	—	—
6	9.52	0.375	9/16-18	1/4	34.5	5,000	27.5	4,000	27.5	4,000	27.5	4,000
8	12.70	0.500	3/4-16	3/8	31.0	4,500	27.5	4,000	21.0	3,000	24.1	3,500
10	15.88	0.625	7/8-14	1/2	24.0	3,500	21.0	3,000	21.0	3,000	—	—
12	19.05	0.750	1 1/16-12	3/4	24.0	3,500	21.0	3,000	17.0	2,500	15.5	2,250
14	22.22	0.875	1 3/16-12	3/4	21.0	3,000	17.0	2,500	17.0	2,500	—	—
16	25.40	1.000	1 5/16-12	1	21.0	3,000	17.0	2,500	14.0	2,000	13.8	2,000
20	31.75	1.250	1 5/8-12	1 1/4	17.0	2,500	14.0	2,000	8.0	1,150	11.2	1,625
24	38.10	1.500	1 7/8-12	1 1/2	14.0	2,000	10.5	1,500	7.0	1,000	8.6	1,250
32	50.30	2.000	2 1/2-12	2	10.5	1,500	8.0	1,125	7.0	1,000	7.8	1,125

MPa (Mega Paskels) – 1 MPa = 145 PSI

SAE J1453 Working, Proof & Minimum Pressures for Face Seal Fittings

Note: In the case of a fitting that is a jump size, it is recommend that the lower pressure of the two ends must be recognized as the working pressure rating for that fitting. This is also the case if the fitting has one or more different style ends. For example, Face Seal to pipe threads. In this case it is also recommended that the lower pressure rating of the two different style ends must be recognized as the working pressure rating for that fitting.

Nom SAE Dash Size	Straight Fittings Working MPa	Straight Fittings Working PSI	Straight Fittings Proof MPa	Straight Fittings Proof PSI	Straight Fittings Min. Burst MPa	Straight Fittings Min. Burst PSI	Adjustable Fittings Working MPa	Adjustable Fittings Working PSI	Adjustable Fittings Proof MPa	Adjustable Fittings Proof PSI	Adjustable Fittings Min. Burst MPa	Adjustable Fittings Min. Burst PSI
4	41.3	6,000	82.5	12,000	165	24,000	41.3	6,000	82.5	12,000	165.0	24,000
6	41.3	6,000	82.5	12,000	165	24,000	41.3	6,000	82.5	12,000	165.0	24,000
8	41.3	6,000	82.5	12,000	165	24,000	41.3	6,000	82.5	12,000	165.0	24,000
10	41.3	6,000	82.5	12,000	165	24,000	41.3	6,000	82.5	12,000	165.0	24,000
12	41.3	6,000	82.5	12,000	165	24,000	41.3	6,000	82.5	12,000	165.0	24,000
16	41.3	6,000	82.5	12,000	165	24,000	34.5	5,000	69.9	10,000	138.0	20,000
20	27.5	4,000	55.0	8,000	110	16,000	27.5	4,000	55.0	8,000	110.0	16,000
24	27.5	4,000	55.0	8,000	110	16,000	20.7	3,000	41.3	6,000	82.5	12,000

MPa (Mega Paskels) – 1 MPa = 145 PSI