



60° Cone Adapters: JIS vs. BS5200

Parker's P4 JIS 60° cone adapters are manufactured in accordance to JIS B8363 while Parker's K4 BSP adapters are manufactured in accordance to BS5200. The following are some pronounced differences that may help in distinguishing between the K4 and P4 fittings:

1. Thread length ("A" dimensions)
2. 60° angle diameter ("B" dimensions)
3. The undercut area (area between threads and hex body) on the straight K4 fittings incorporates a bonded seal "locating pilot" for bonded seal
4. Parker's JIS fittings are stamped with "JIS" on the forging body or hex of fitting

See Figs. J3 and J4 for details and see [Tables J3](#) and [J4](#) below for specific dimensional differences.

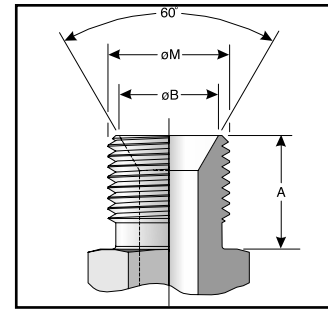


Fig. J3 – JIS B8363 60° Cone Connection (P4)

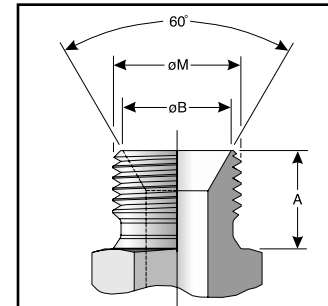


Fig. J4 – BS B5200 60° Cone Connection (K4)

Size	BSPP Thread	M	A	B
2	1/8-28	0.38	0.418	0.276
4	1/4-19	0.51	0.570	0.394
6	3/8-19	0.65	0.609	0.531
8	1/2-14	0.82	0.726	0.650
12	3/4-14	1.04	0.805	0.866
16	1-11	1.30	0.883	1.102
20	1 1/4-11	1.64	0.945	1.417
24	1 1/2-11	1.87	0.962	1.654
32	2-11	2.34	1.102	2.126

Table J3 – Dimensions of JIS B8363 60° Cone Connection

Size	BSPP Thread	M	A	B
2	1/8-28	0.38	0.315	0.295
4	1/4-19	0.51	0.433	0.409
6	3/8-19	0.65	0.472	0.551
8	1/2-14	0.82	0.551	0.689
10	5/8-14	0.90	0.630	0.760
12	3/4-14	1.04	0.630	0.902
16	1-11	1.30	0.748	1.130
20	1 1/4-11	1.64	0.787	1.449
24	1 1/2-11	1.87	0.866	1.681
32	2-11	2.34	0.984	2.150

Table J4 – Dimensions of BS B5200 60° Cone Connection

While the 60° cone versions of JIS and K4 fittings utilize the same BSPP threads and seat angle, not all dimensions are consistent. Therefore, they cannot be interchanged because the differences can cause leakage problems. An example of this is illustrated in Fig. J5.

In summary, interchanging components between JIS and K4 adapters can, in some cases, lead to leakage problems and thus is not a recommended practice. The combination of matching proper components will create an effective seal as illustrated in Fig J6.

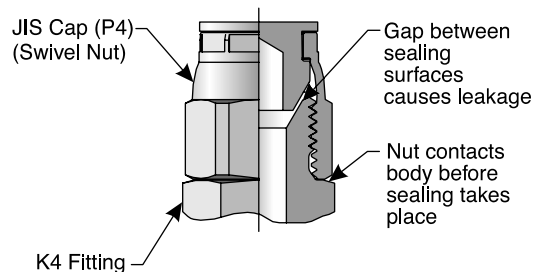


Fig. J5 – Illustration Showing Potential Leakage Problem When Mixing JIS and K4 Components

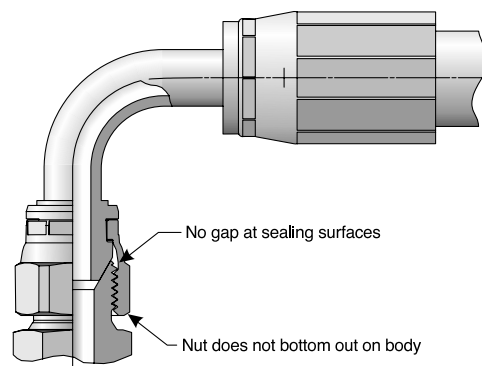


Fig. J6 – An Effective Seal Created with the Proper Combination of Components

Dimensions and pressures for reference only, subject to change.