

## JIS THREADS

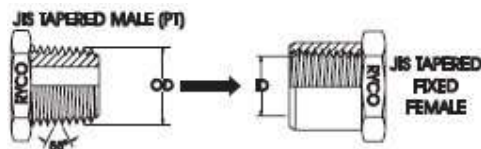
JIS is JAPANESE INDUSTRIAL STANDARDS

There are four popular coupling styles in Japan.

### 1. JIS Tapered Pipe Thread

The Japanese tapered pipe thread connector is identical to and interchangeable with the BSPT (tapered) connector. The Japanese male thread does not have a 30° Flare and will not mate with the BSPP female swivel with conical seat. The seal on the Japanese tapered pipe thread connector is made on the threads. Use of a thread sealant is recommended.

Thread form per JIS B 0203 (identical to BSPT)

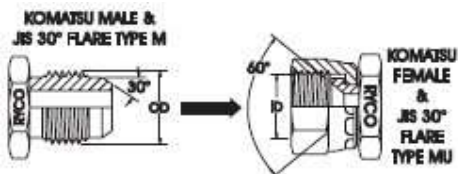


Refer to BSPT section for dimensions of threads.

### 2. JIS 30° Flare (Female Internal Cone Seat)

This connection uses a 60° concave (inverted) seat and British Standard Pipe Parallel threads. They are not interchangeable with BSPP conical seat couplings, because the cone seats are opposite.

Thread form per JIS B 0202 (identical to BSPP)

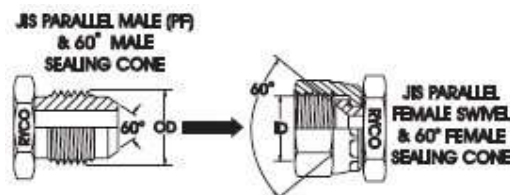


Refer to BSPT section for dimensions of threads.

### 3. Komatsu 30° flare (Female Internal Cone Seat)

Threads commonly used on Komatsu equipment (30° cone) have metric thread form.

| MALE THREAD<br>OD & PITCH | DASH<br>SIZE | FEMALE<br>THREAD ID |
|---------------------------|--------------|---------------------|
| mm                        |              | mm                  |
| M14 x 1,5                 | -1415        | 12,5                |
| M18 x 1,5                 | -1815        | 16,5                |
| M22 x 1,5                 | -2215        | 20,5                |
| M24 x 1,5                 | -2415        | 22,5                |
| M30 x 1,5                 | -3015        | 28,5                |
| M33 x 1,5                 | -3315        | 31,5                |
| M36 x 1,5                 | -3615        | 34,5                |
| M33 x 1,5                 | -3315        | 31,5                |



### 4. Komatsu Style Flange Fitting JIS B 8363

The Komatsu style Flange fitting is nearly identical to, and fully interchangeable with, the SAE Code 61 flange fitting\*. The O Ring dimensions are different between all sizes. When replacing a Komatsu style flange with an SAE style flange, an SAE style O Ring must always be used. \*5/8" is not in the SAE Standards.

### BSPT & BSPP THREADS DIMENSIONS

| BSPT & BSPP<br>SIZE & PITCH | DASH<br>SIZE | BSPT MALE<br>THREAD OD |      | BSPP MALE<br>THREAD OD |      | BSPT FEMALE<br>THREAD ID |      | BSPP FEMALE<br>THREAD ID |      |
|-----------------------------|--------------|------------------------|------|------------------------|------|--------------------------|------|--------------------------|------|
| inch – TPI                  |              | mm                     | inch | mm                     | inch | mm                       | inch | mm                       | inch |
| 1/8 – 28                    | -2           | 9,5                    | 0.37 | 9,6                    | 0.38 | 8,4                      | 0.33 | 8,6                      | 0.34 |
| 1/4 – 19                    | -4           | 12,8                   | 0.5  | 13,0                   | 0.51 | 11,2                     | 0.44 | 11,9                     | 0.47 |
| 3/8 – 19                    | -6           | 16,3                   | 0.64 | 16,5                   | 0.65 | 14,7                     | 0.59 | 15,2                     | 0.6  |
| 1/2 – 14                    | -8           | 20,4                   | 0.8  | 20,8                   | 0.82 | 18,3                     | 0.72 | 19,1                     | 0.75 |
| 5/8 – 14                    | -10          | 22,5                   | 0.89 | 22,8                   | 0.9  | 20,6                     | 0.81 | 20,8                     | 0.82 |
| 3/4 – 14                    | -12          | 25,9                   | 1.02 | 26,3                   | 1.04 | 23,9                     | 0.94 | 24,6                     | 0.97 |
| 1 – 11                      | -16          | 32,6                   | 1.28 | 33,1                   | 1.3  | 29,7                     | 1.17 | 30,7                     | 1.21 |
| 1.1/4 – 11                  | -20          | 41,1                   | 1.62 | 41,8                   | 1.64 | 38,6                     | 1.52 | 39,4                     | 1.55 |
| 1.1/2 – 11                  | -24          | 47,0                   | 1.85 | 47,7                   | 1.88 | 44,5                     | 1.75 | 45,5                     | 1.79 |
| 2 – 11                      | -32          | 58,6                   | 2.31 | 59,5                   | 2.34 | 56,4                     | 2.22 | 57,4                     | 2.26 |
| 2.1/2 – 11                  | -40          | 74,1                   | 2.92 | 75,1                   | 2.95 | 71,9                     | 2.83 | 72,6                     | 2.86 |
| 3 – 11                      | -48          | 86,6                   | 3.41 | 87,9                   | 3.46 | 84,6                     | 3.33 | 85,4                     | 3.36 |