

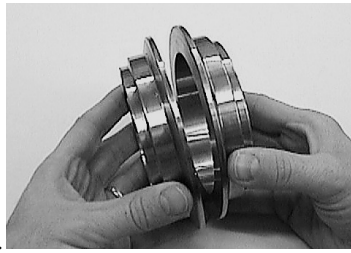
How to determine PROPER DIMENSIONS FOR YOUR V-BAND COUPLING APPLICATION

OUTSIDE FLANGE DIAMETER

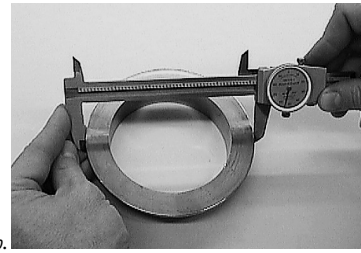
Using Dial Calipers

Use dial calipers to measure the largest or “outside” diameter of your flange as shown in illustration 1b. (or use a “pi” tape rule as shown in illustration 1c.) Denote this outside flange diameter as “fd”.

1a.



1b.



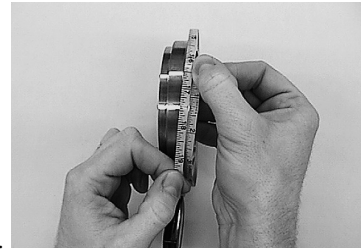
OR

Using Tape Rule

Use a narrow tape rule to determine the flange circumference (C) as shown in 1c.

Use the formula: **Flange Diameter = $C \div 3.1416$**

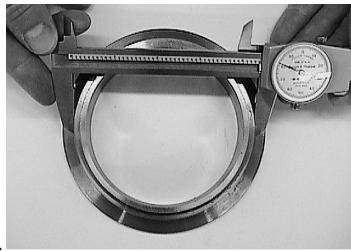
1c.



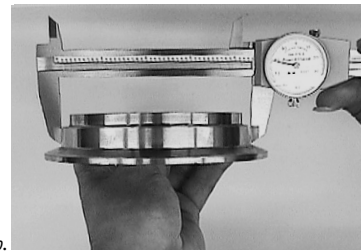
FLANGE BASE DIAMETER

Use dial calipers to measure the “base” diameter of your flange as shown in illustrations 2a and 2b. This dimension can also be measured with a narrow tape rule or with a “pi” tape rule as shown in illustration 1c. Denote this base diameter as “bd”.

2a.



2b.



FLANGE HEIGHT CALCULATION

To determine the height of your flange, you can use the previously measured outside flange diameter “fd”, and the flange base diameter “bd”.

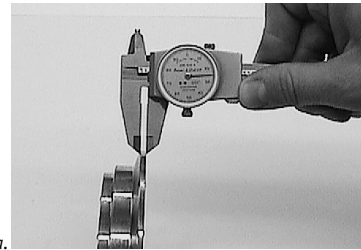
Use the formula: **Flange Height, fh = $(fd - bd) \div 2$**

FLANGE APEX

This dimension is best determined by measurement with an optical comparator or from the actual design print of the flange. However, it can be measured with great care using dial calipers as shown in illustration 4a. Denote this flange apex as “a”.

*Remember that O-rings and gaskets will change your final width dimensions.

4a.

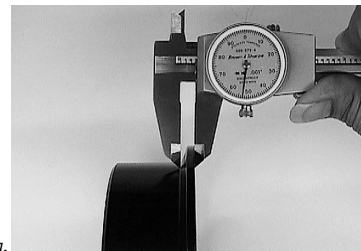


FLANGE BASE WIDTH

This dimension is best determined by measurement with an optical comparator or from the actual design print of the flange. However, it can be measured with care using dial calipers as shown in illustration 5a. Denote this base width as “w”.

*Remember that O-rings and gaskets will change your final width dimensions.

5a.



FLANGE ANGLE

This dimension is best determined by measurement with an optical comparator or from the actual design print of the flange. However, it can be determined by using the previously measured flange apex “a”, flange base width “w”, and flange height “fh”.

Use the formula: **Flange Angle = $TAN^{-1} [(w - a) \div fh]$**