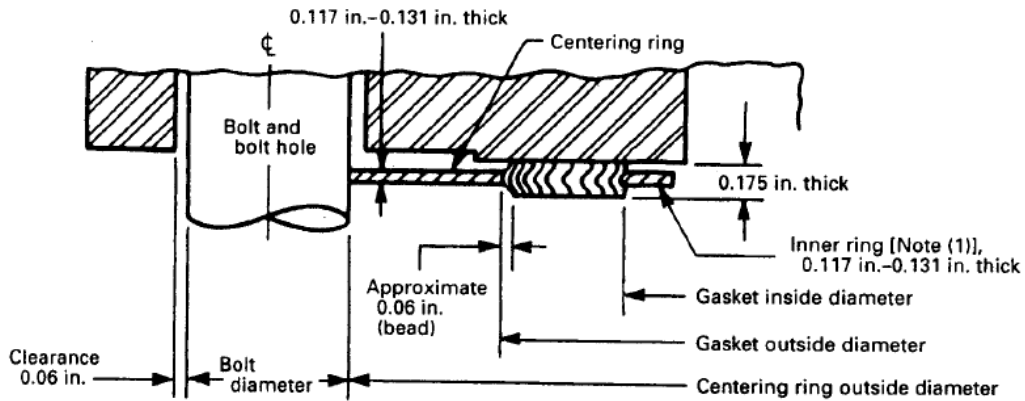


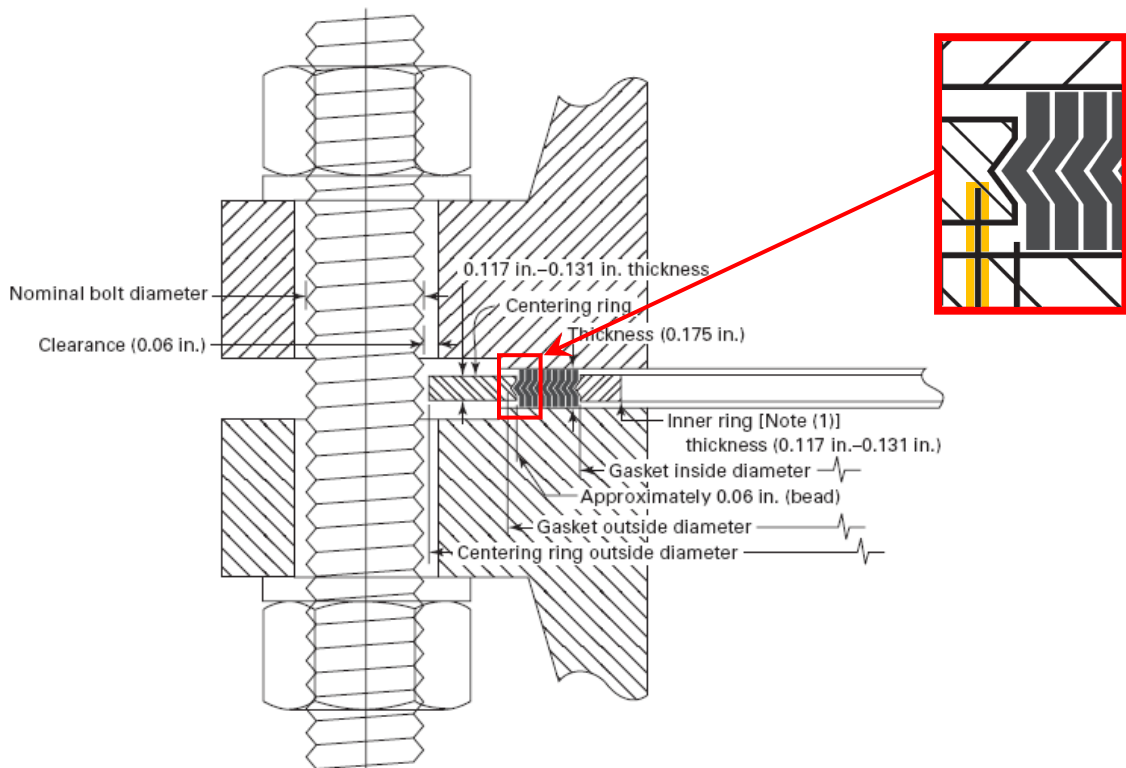


B16.20) has been somewhat ambiguous and left open to interpretation. It is our belief that the confusion is due to the fact that the specification verbiage does not state how to measure the dimension and the schematics that reference the dimension have not been clear in the past (see below example schematics taken from previous version of B16.20):

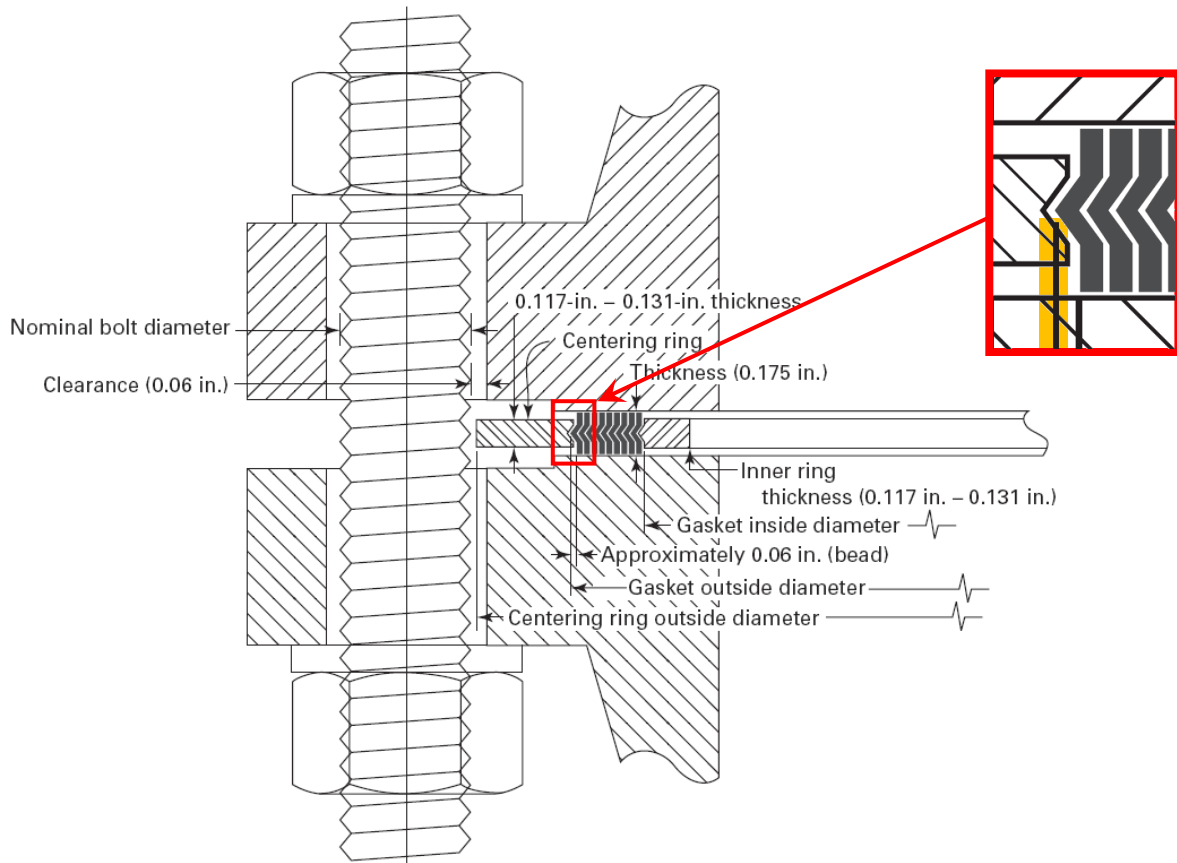
**ASME B16.20 – 1998 (Table 9)** – schematic is not accurately scaled and dimension references are difficult to see.



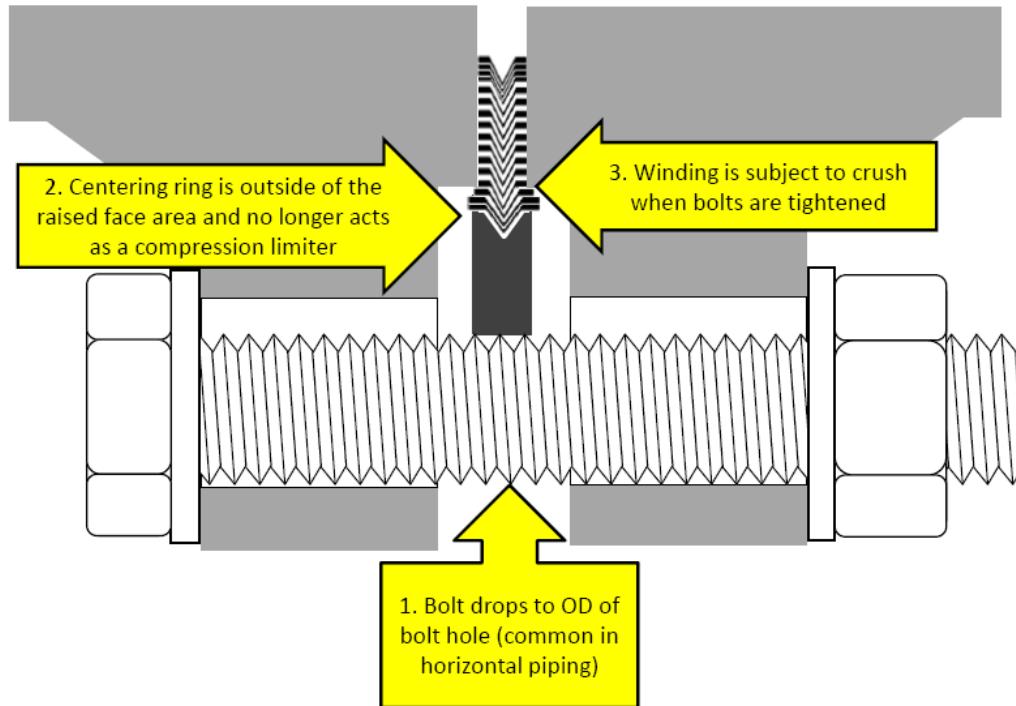
**ASME B16.20 – 2007 (Figure I-4)** – Schematic is much easier to read, but certain dimension references are still not properly placed. For example, see “Gasket outside diameter”, which is highlighted in orange below. The reference line is not pointing to the bead of the winding where it should be.



**ASME B16.20 – 2012 (Figure I-1)** – ASME Subcommittee G committee members corrected the drawing so that the “Gasket outside diameter” reference line points to the outside of the winding bead NOT the groove in the outer ring (highlighted below in orange). The outer edge of the bead IS the correct location for measuring the gasket outside diameter to validate compliance with ASME B16.20.



**NOTE:** One of the concerns expressed with ASME B16.20 dimensions is that the standard specifies “gasket outer diameters” that can potentially places the windings outside of the raised face contact surface of ASME flange, due to the clearance between the bolt holes and bolts. If the outer diameter of the winding is outside the outer diameter of the raised face area, the outer retainer ring (which also acts as a compression limiter) will not function properly and may allow the windings to be over compressed (see below).



If this is a concern of your customers, we suggest considering the Garlock EDGE® Gaskets, as these gaskets have a reduced outer diameter to address this concern, among features which provide additional benefits over conventional spiral wound gaskets. However, keep in mind that the EDGE® gasket, while an improved design, does not meet the dimensions specified in B16.20.

## **Kammprofile Gaskets**

In June 2012 “grooved metal gaskets with covering layers” (kammprofiles) were added to ASME B16.20. The specification is very clear about the method of construction, finished product dimensions as well as the required markings on the gaskets.

You may encounter “hybrid” metal gaskets in the industry that are a cross between a spiral wound and kammprofile gasket. One such design is a thick, extruded wire that is spiral wound and welded to look like a kammprofile. However, products, such as this, are NOT ASME B16.20 compliant. Per section 5.2.2 of the specification:

*Grooved metal gaskets with covering layers shall be constructed as a **concentrically grooved metal core** (sealing element) with a centering ring.*

Please contact Applications Engineering if you have any questions!