

B&D PRODUCTS (HALIFAX) LTD

DATA SHEET #103 for:

Bi-Metallic Flanges: Based on BS10 (1960) Tables D/E

General:

Bi-metal (carbon steel and gunmetal) flanges, also known as composite flanges, spinning flanges or QA (Quick Action) flanges. To be used with copper and copper-alloy tubes for water (including potable), gas and sanitary applications.

Pressure-Temperature Ratings:

Table Reference	Temperature (Degrees C)					
	-10/120	150		200	230	260
	Maximum Permissible Working Pressure (bar)					
Table D	7	6.5		6	4.5	3.5
Table E	12	11.5		9.5	8.4	7

Note: Intermediate values may be inferred by linear interpolation.

Materials:

Outer flange: Carbon steel conforming to BS4360 Grade 40A.

Inners: Cast Gunmetal conforming to BS1400 LG2.

Finishes:

Outer flange: Machined all over, with green (RAL6011) epoxy coating for corrosion resistance.

Inner: Machined all over, supplied with tube stop, for location of tube.

Bolting:

The dimensions and finishes of bolting materials should comply with the following:-

-Studs: BS4439 Grade 4.8

-Hexagon Headed Bolts: BS3692 or BS4190 Grade 4.6

-Stud-bolts: BS4882 Carbon steel.

-Nuts: BS3692, BS4190 Grade 4, or BS4882 Grade 2H/M as appropriate.

Where washers are used, they should conform to BS4320 (1968) Table 3.

Gaskets:

Inside bolts gaskets should be used, with the material selection made with consideration of the suitability for the fluid, at the intended working temperature and pressure conditions.

Attachment of flanges:

Gunmetal inners to be silver brazed to copper or copper-alloy tubes, to the requirements of appropriate application standard.