



## Data Sheet for:

### **Bi-Metallic Flanges to BS4504 Part 2 (1974) Table 16/23**

#### 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 and sanitary applications.

#### Pressure-Temperature Ratings:

Nominal Pressure (bar)	Temperature (Degrees C)						
16	-10/120	150	180	200	220	250	260
	Maximum Permissible Working Pressure (bar)						
	16	16	16	13.5	11.3	8	7

#### 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 the appropriate application standard.

Disclaimer: While care has been taken to ensure the information contained in this publication is correct, Oliver Ashworth Limited accepts no responsibility or liability for information found to be misleading. Technical information has been supplied by our supply chain partners. It is the responsibility of the end-user to ensure that the products used are suitable for their intended application.

**Ashworth, Mill Hill Street, Bolton, Greater Manchester, BL2 2AB,  
Tel: 0161 967 0400**

**Enquiries@Ashworth.uk.com**

**Technical.services@Ashworth.uk.com**