

BS 746:2014



BSI Standards Publication

## Specification for gas meter unions and adaptors

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## Contents

Foreword *ii*

1	Scope	1
2	Normative references	1
3	Terms and definitions	2
4	Materials	2
5	Dimensions	5
6	Machined surfaces	5
7	Screw threads	5
8	Strength of nuts and female adaptor ends	5
9	Finish	6
10	Marking	6

Bibliography 15

### List of figures

Figure 1 – Basic Whitworth form 5

### List of tables

Table 1	– Initial and release torques	3
Table 2	– Torque for strength test	6
Table 3	– Boss dimensions	7
Table 4	– Nut dimensions	8
Table 5	– Liner dimensions	9
Table 6	– Reducing adaptor dimensions	10
Table 7	– Increasing adaptor dimensions	11
Table 8	– Union washer dimensions	12
Table 9	– Adaptor washer dimensions	12
Table 10	– Sealing disc dimensions	13
Table 11	– External thread dimensions	14
Table 12	– Internal thread dimensions	14

### Summary of pages

This document comprises a front cover, an inside front cover, pages i to ii, pages 1 to 16, an inside back cover and a back cover.

## Foreword

### Publishing information

This British Standard is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 30 November 2014. It was prepared by Technical Committee GSE/25, *Gas meters*. A list of organizations represented on this committee can be obtained on request to its secretary.

### Supersession

BS 746:2014 supersedes BS 746:2005+A1:2009, which is withdrawn.

### Relationship with other publications

This standard specifies fittings to be used in conjunction with gas meters such as those specified by BS EN 1359 and BS EN 14236.

### Information about this document

This is a full revision of the standard, and introduces the following principal changes.

- Dimensional changes have been made to ensure that the flat parts of the nuts engage directly on the flat parts of the flanges such that even pressure is applied to the surfaces of the washers.
- The properties of the sealing washer have been redefined.
- Additional tests for fittings and washer performance have been added.
- Hexagonal nuts are now permitted as an alternative to octagonal nuts.

This document may be used in the procurement of fittings.

### Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principal auxiliary verb is "shall".

*Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.*

### Contractual and legal considerations

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

**Compliance with a British Standard cannot confer immunity from legal obligations.**

## 1 Scope

This British Standard specifies requirements and test methods for unions and adaptors for the installation of low pressure gas meters. It is applicable to unions and adaptors for gas meters for use with 1st, 2nd and 3rd family gases at temperatures between  $-20\text{ }^{\circ}\text{C}$  and  $+60\text{ }^{\circ}\text{C}$ , up to a maximum operating pressure of 75 mbar<sup>1)</sup> and a maximum incidental pressure of 200 mbar. The gas tightness of the gas meter unions and adaptors is also specified.

*NOTE* The tests specified in this standard are type tests, except for that specified in 4.2.3.

## 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS 1936-1, *Undercuts and runouts for screw threads – Part 1: Inch screw threads*

BS 7371-6, *Coatings on metal fasteners – Part 6: Specification for hot dipped galvanized coatings*

BS EN 549, *Specification for rubber materials for gas appliances and gas equipment*

BS EN 1562, *Founding – Malleable cast iron*

BS EN 1652, *Copper and copper alloys – Plate, sheet, strip and circles for general purposes*

BS EN 1976, *Copper and copper alloys – Cast unwrought copper products*

BS EN 1982, *Copper and copper alloys – Ingots and castings*

BS EN 10088-3:2005, *Stainless steels – Part 3: Technical delivery conditions for semi-finished products, bars, rods, wire, sections and bright products of corrosion resisting steel for general purposes*

BS EN 10242, *Threaded pipe fittings in malleable cast iron*

BS EN 12164, *Copper and copper alloys – Rod for free machining purposes*

BS EN 12165, *Copper and copper alloys – Wrought and unwrought forging stock*

BS EN 12167, *Copper and copper alloys – Profiles and rectangular bar for general purposes*

BS EN 12168, *Copper and copper alloys – Hollow rod for free machining purposes*

BS EN 12329:2000, *Corrosion protection of metals – Electrodeposited coatings of zinc with supplementary treatment on iron or steel*

BS EN 12420, *Copper and copper alloys – Forgings*

BS EN ISO 27830, *Metallic and other inorganic coatings – Guidelines for specifying metallic and inorganic coatings*

PD 970, *Wrought steels for mechanical and allied engineering purposes – Requirements for carbon, carbon manganese and alloy hot worked or cold finished steels*

<sup>1)</sup> 1 bar = 105 N/m<sup>2</sup> = 100 kPa.