ISO 16486-3:2025-01 (E)

Plastics piping systems for the supply of gaseous fuels - Unplasticized polyamide (PA-U) piping systems with fusion jointing and mechanical jointing - Part 3: Fittings

Contents

Page

Foreword ..... **iv**

Introduction ..... **v**

1 Scope **1**

2 Normative references **1**

3 Terms and definitions **2**

4 Material **3**
4.1 PA-U compound 3
4.2 Material for non-unplasticized polyamide parts 3
4.2.1 General 3
4.2.2 Metal parts 3
4.2.3 Elastomers 3
4.2.4 Other materials 4

5 General characteristics **4**
5.1 Appearance 4
5.2 Design 4
5.3 Colour 4
5.4 Electrical characteristics for electrofusion fittings 4
5.5 Appearance of factory-made fusion joints 4
5.6 Fusion compatibility 5
5.7 Appearance of transition fittings 5

6 Geometrical characteristics **5**
6.1 Measurement of dimensions 5
6.2 Dimensions of electrofusion sockets 5
6.2.1 Diameters and lengths of electrofusion sockets 5
6.2.2 Wall thickness 5
6.3 Dimensions of spigot end fittings 7
6.4 Dimensions of tapping tees 9
6.5 Dimensions of transition fittings to other materials 9

7 Mechanical characteristics **9**
7.1 General 9
7.2 Conditioning 10
7.3 Mechanical requirements 10
7.4 Additional requirements for transition fittings 12

8 Physical characteristics **12**
8.1 Conditioning 12
8.2 Requirements 12

9 Chemical resistance of fittings in contact with chemicals **13**

10 Performance requirements **13**

11 Marking **13**
11.1 General 13
11.2 Minimum required marking of fittings 13

11.3 Additional information required on fitting or label 14
11.4 Fusion system recognition 14
12 Delivery conditions **14**
Annex A (informative) **Examples of typical terminal connections for electrofusion** **15**
Annex B (normative) **Short-term pressure test method** **17**
Annex C (normative) **Tensile test fitting/pipe assemblies** **19**
Bibliography **20**