# DIN EN ISO 16486-4:2025-10 (E)

## Plastics piping systems for the supply of gaseous fuels - Unplasticized polyamide (PA-U) piping systems with fusion jointing and mechanical jointing - Part 4: Valves (ISO 16486-4:2025)

## Contents

Page


**Foreword** ..... **v**

**Introduction** ..... **vi**

**1 Scope** ..... **1**

**2 Normative references** ..... **1**

**3 Terms and definitions** ..... **2**
3.1 General terms ..... 3
3.2 Terms relating to design ..... 3

**4 Symbols and abbreviated terms** ..... **3**

**5 Material** ..... **4**
5.1 Compound for valve body ..... 4
5.1.1 Compound ..... 4
5.1.2 Fusion compatibility ..... 4
5.2 Material for non-polyamide parts ..... 4
5.2.1 General ..... 4
5.2.2 Components and elements ..... 4
5.2.3 Metal parts ..... 4
5.2.4 Elastomers ..... 5
5.2.5 Greases and lubricants ..... 5
5.2.6 Assembly ..... 5

**6 General characteristics** ..... **5**
6.1 Appearance of the valve ..... 5
6.2 Colour ..... 5
6.3 Design ..... 5
6.3.1 General ..... 5
6.3.2 Valve body ..... 5
6.3.3 Valve terminal ends ..... 5
6.3.4 Operating device ..... 6
6.3.5 Seals ..... 6

**7 Geometrical characteristics** ..... **6**
7.1 General ..... 6
7.2 Measurement of dimensions ..... 6
7.3 Dimensions of spigot ends for valves ..... 6
7.4 Dimensions of valves with electrofusion sockets ..... 6
7.5 Dimensions of the operating device ..... 6

**8 Mechanical characteristics of assembled valves and regional requirements** ..... **7**
8.1 General ..... 7
8.2 Conditioning ..... 7
8.3 Requirements ..... 7
8.3.1 General ..... 7
8.3.2 Air flow rate ..... 13
8.4 Regional requirement ..... 13

**9 Physical characteristics** ..... **13**
9.1 Conditioning ..... 13
9.2 Requirement ..... 14

**10 Performance requirements** ..... **14**
**11 Technical file** ..... **14**
**12 Marking** ..... **15**
12.1 General ..... 15
12.2 Minimum required marking of valves ..... 15
12.3 Additional marking ..... 15
**13 Delivery conditions** ..... **16**
**Annex A** (normative) **Determination of the leaktightness of seat(s) and packing** ..... **17**
**Annex B** (normative) **Test method for leaktightness and ease of operation after tensile loading** ..... **19**
**Bibliography** ..... **21**