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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 33636-2023

Replacing GB/T 33636-2017

**Pneumatic fluid power - Push-in connectors for thermoplastic
tubes**

Issued on: May 23, 2023

Implemented on: May 23, 2023

**Issued by: State Administration for Market Regulation, China National
Standardization Administration**

Table of Contents

Preface	
Introduction	
1 Scope	1
2 Normative references	1
3 Terms and Definitions	1
4 Working conditions	2
5 Structural features	2
6 Tube outer diameter	2
7 design	2
8 logo	12
9 Performance requirements and tests	12
10 Mark	19
11 Labeling instructions	21
Appendix A (Normative) PA pipes for testing	22
Appendix B (Normative) PU tube for testing	25
Reference	28

foreword

This document is in accordance with the provisions of GB/T 1:1-2020 "Guidelines for Standardization Work Part 1: Structure and Drafting Rules for Standardization Documents"

drafting:

This document replaces GB/T 33636-2017 "Pneumatic plug-in fittings for plastic pipes" and is consistent with GB/T 33636-2017

In addition to structural adjustments and editorial changes, the main technical changes are as follows:

- a) Changed working conditions (see Chapter 4, Chapter 4 of the:2017 edition);
- b) Added new joint dimensions (see Chapter 6, Chapter 7, Appendix A and Appendix B);
- c) Increased high temperature pressure test (see 9:4);
- d) The method of testing for leaks has been changed (see 9:8:2:5, 9:7:2:5 of the:2017 edition);

e) Changed the compliance standard of compressed air quality level (see 9:8:2:6, 9:7:2:6 of the:2017 edition);

f) Changed the cyclic vibration durability test (see 9:9, 9:8 of the:2017 edition);

g) The hardness of the pipe material has been changed (see A:2, B:2, A:2, B:2 of the:2017 edition):

This document is equivalent to ISO 14743:2020 "Pneumatic plug-in fittings for plastic pipes":

The following minimal editorial changes have been made to this document:

--- Deleted the notes in "A:1" and "B:1":

Please note that some contents of this document may refer to patents: The issuing agency of this document assumes no responsibility for identifying patents:

Introduction

In a pneumatic system, power is transmitted and controlled through compressed air in a circuit:

The components are connected to each other via the ports by means of nipples (fittings) and connections:

Pneumatic push-in fittings for plastic pipes

1 Scope

This document specifies the design of plug-in pipe joints used for thermoplastic pipes with an outer diameter of 3 mm to 16 mm (hereinafter referred to as plastic pipes):

General requirements and test methods for design and performance:

The test methods in this document apply to plug-in fitting assemblies used in pneumatic systems: This document does not apply to air brake systems:

2 Normative references

The contents of the following documents constitute the essential provisions of this document through normative references in the text: Among them, dated references

For documents, only the version corresponding to the date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to

this document:

Note: GB/T 7306:1-2000 55° sealing pipe thread Part 1: Cylindrical internal thread and conical external thread (eqvISO 7-1:1994)

GB/T 7306:2-2000 55° Sealing Pipe Threads Part 2: Conical Internal Thread and Conical External Thread (eqvISO 7-1:1994)

ISO 4759-1 Tolerances of fasteners Part 1: Bolts, screws, studs and nuts Product grades A, B and C (Tolerances

Note: GB/T 3103:1-2002 Fastener tolerance bolts, screws, studs and nuts (idtISO 4759-1:2000)

Note: GB/T 17446-2012 Fluid Power System and Component Vocabulary (ISO 5598:2008, IDT)

ISO 8573-1:2010 Compressed air Part 1: Pollutants and purification levels (Compressedair-Part 1:Contami-

Note: GB/T 13277:1-2008 Compressed air Part 1: Pollutant purification level (ISO 8573-1:2001, MOD)

ISO 10619-1 Rubber and plastic hoses and unreinforced hoses - Measurement of flexibility and stiffness - Part 1: Bend test at room temperature

Note: GB/T 5565:1-2017 Measurement of flexibility and stiffness of rubber and plastic hoses and non-reinforced hoses Part 1: Bending test at room temperature

(ISO 10619-1:2011, IDT)

ends)

Note: GB/T 14038-2008 pneumatic connection port and stud end (ISO 16030:2001/Amd:1:2005, IDT)

and UNRThreadForm)]

3 Terms and Definitions

The terms and definitions defined in ISO 5598 apply to this document:

ISO and IEC maintain terminology databases for standardization at: