

JIS

JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS K 6770 : 2016

(JXPA/JPIF/JSA)

**Crosslinked polyethylene (PE-X) pipe
fittings**

ICS 23.040.45 ; 83.140.30 ; 91.140.60

Reference number : JIS K 6770 : 2016 (E)

K 6770 : 2016

Date of Establishment: 1991-02-01

Date of Revision: 2016-03-22

Date of Public Notice in Official Gazette: 2016-03-22

Investigated by: Japanese Industrial Standards Committee

Standards Board for ISO area

Technical Committee on Chemical Products and

Analytical Methods

JIS K 6770 : 2016, First English edition published in 2016-10

Translated and published by: Japanese Standards Association
Mita MT Building, 3-13-12, Mita, Minato-ku, Tokyo, 108-0073 JAPAN

In the event of any doubts arising as to the contents,
the original JIS is to be the final authority.

© JSA 2016

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

Printed in Japan

HN

PROTECTED BY COPYRIGHT

Contents

	Page
Introduction	1
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Classification and symbols	2
5 Performance	3
6 Appearance	4
7 Structure and shape	4
8 Materials	5
9 Test method	5
9.1 Appearance, structure and shape	5
9.2 Dimensions	5
9.3 Air-tightness test	5
9.4 Water-tightness test	5
9.5 Hydrostatic test	5
9.6 Negative pressure resistance test	5
9.7 Hot internal-pressure creep test	6
9.8 Pull-out test	6
9.9 Compression peeling test	6
9.10 Leaching test	7
9.11 Gel content test	7
9.12 Expression of test results	7
10 Inspection	7
11 Marking	8
12 Precautions on handling	9
Annex JA (normative) Leaching test method for crosslinked polyethylene pipe fittings	10
Annex JB (informative) Jointing of Class E fitting and pipe for crosslinked polyethylene pipe fitting	12
Annex JC (informative) Header for crosslinked polyethylene pipes	15
Annex JD (informative) Comparison table between JIS and corresponding International Standard	18

Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by Japan Cross Linked Polyethylene Pipe Association (JXPA)/The Japan Plastics Industry Federation (JPIF)/Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14. Consequently **JIS K 6770: 2011** is replaced with this Standard.

However, **JIS K 6770: 2011** may be applied in the **JIS** mark certification based on the relevant provisions of Article 19 Clause 1, etc. of the Industrial Standardization Law until March 21, 2017.

This **JIS** document is protected by the Copyright Law.

Attention is drawn to the possibility that some parts of this Standard may conflict with patent rights, applications for a patent after opening to the public or utility model rights. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying any of such patent rights, applications for a patent after opening to the public or utility model rights.

Crosslinked polyethylene (PE-X) pipe fittings

Introduction

This Japanese Industrial Standard has been prepared based on the first edition of ISO 15875-3 published in 2003 with some modifications of the technical contents. The last revision was made in 2011, and the revision at this time is to follow the ordinance of the Ministry of Health, Labour and Welfare in describing the criteria for leaching.

The portions given sidelines or dotted underlines are the matters in which the contents of the corresponding International Standard have been modified. A list of modifications with the explanations is given in Annex JD.

1 Scope

This Standard specifies pipe fittings (hereafter referred to as “fittings”) for jointing crosslinked polyethylene (PE-X) pipes (hereafter referred to as “pipes”) specified in JIS K 6769, to be mainly used for the conveyance of water at a temperature of 95 °C or lower. Crosslinked polyethylene pipe fittings for water supply are covered by JIS K 6788.

NOTE : The International Standard corresponding to this Standard and the symbol of degree of correspondence are as follows.

ISO 15875-3 : 2003 *Plastics piping systems for hot and cold water installations — Crosslinked polyethylene (PE-X) — Part 3 : Fittings* (MOD)

In addition, symbols which denote the degree of correspondence in the contents between the relevant International Standard and JIS are IDT (identical), MOD (modified), and NEQ (not equivalent) according to ISO/IEC Guide 21-1.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS B 0251 *Limit gauges for metric screw threads*

JIS B 0253 *Gauges for taper pipe threads*

JIS B 0254 *Limit Gauges for Parallel Pipe Threads*

JIS B 7502 *Micrometer callipers*

JIS B 7507 *Vernier, dial and digital callipers*

JIS K 6769 *Crosslinked polyethylene (PE-X) pipes*

JIS K 6788 *Crosslinked polyethylene (PE-X) pipe fittings for water supply*