



JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS B 8471 : 2004
(JAC/JSA)

Water pipe line—Solenoid valves

ICS 23.060.40

Reference number : JIS B 8471 : 2004 (E)

PROTECTED BY COPYRIGHT

 **Documents**
Document Sharing Hub

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 Automatic Controls Industrial Association (JAC)/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 B 8471 : 1994** is replaced with this Standard.

Attention is drawn to the possibility that some parts of this Standard may conflict with a patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have technical properties. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying the patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have the said technical properties.

Date of Establishment: 1977-08-01

Date of Revision: 2004-03-20

Date of Public Notice in Official Gazette: 2004-03-22

Investigated by: Japanese Industrial Standards Committee

Standards Board

Technical Committee on Industrial
Machinery

JIS B 8471 : 2004, First English edition published in 2004-07

Translated and published by: Japanese Standards Association
4-1-24, Akasaka, Minato-ku, Tokyo, 107-8440 JAPAN

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

© JSA 2004

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

PROTECTED BY COPYRIGHT

Contents

	Page
1 Scope	1
2 Normative references	1
3 Definitions	1
4 Classification	2
5 Performance	2
6 Construction	3
7 Appearance	5
8 Materials	5
9 Test methods	5
9.1 Operation test	5
9.2 Pressure proof test	5
9.3 Internal leakage test	6
9.4 Flow characteristic test	6
9.5 Permissible maximum temperature test	6
9.6 Insulation resistance test	6
9.7 Withstand voltage test	6
9.8 Durability test	6
10 Inspections	6
10.1 Type inspection	7
10.2 Acceptance inspection	7
11 Packaging	8
12 Designation	8
13 Marking	8

Water pipe line—Solenoid valves

1 Scope This Japanese Industrial Standard specifies solenoid valves, employed in pipe lines for industrial water flow (hereafter referred to as “solenoid valves”) having a function of opening/closing with the following specifications.

- a) **Range of working pressure difference** The range of working pressure difference shall be between 0 MPa to 1.0 MPa.
- b) **Maximum permissible working pressure** The maximum permissible working pressure shall be 1.0 MPa.
- c) **Ambient temperature** The ambient temperature shall be 5 °C to 40 °C.
- d) **Water temperature** The water temperature shall be 2 types of 50 °C or lower and 90 °C or lower.
- e) **Nominal bore size** The nominal bore size shall be 50A or less.
- f) **Thermal class of electrical insulation** The thermal class of electrical insulation is given in table 4.

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

JIS B 0100 *Glossary of terms for valves*

JIS B 0203 *Taper pipe threads*

JIS B 2005-2-3 *Industrial-process control valves—Part 2-3 : Flow capacity—Test procedures*

JIS B 2220 *Steel welding pipe flanges*

JIS B 2239 *General rules for cast iron pipe flanges*

JIS B 2240 *General rules for copper alloy pipe flanges*

JIS B 8602 *Pipe flanges for refrigerant*

JIS C 1302 *Insulation resistance testers*

JIS C 4003 *Thermal evaluation and classification of electrical insulation*

3 Definitions For the purposes of this Standard, the definitions given in **JIS B 0100** and the following definitions apply.

- a) **industrial water** Water necessary for industrial production.
- b) **working pressure difference** Difference between the valve inlet side and outlet side pressures enabling the valve to work.
- c) **range of working pressure difference** The range between the upper and lower limits of the working pressure difference.