

This MSS Standard Practice was developed under the consensus of the MSS Technical Committee 114 and the MSS Coordinating Committee. The content of this Standard Practice is the resulting efforts of competent and experienced volunteers to provide an effective, clear, and non-exclusive standard that will benefit the industry as a whole. This MSS Standard Practice describes minimal requirements and is intended as a basis for common practice by the manufacturer, the user, and the general public. The existence of an MSS Standard Practice does not in itself preclude the manufacture, sale, or use of products not conforming to the Standard Practice. Mandatory conformance to this Standard Practice is established only by reference in other documents such as a code, specification, sales contract, or public law, as applicable. MSS has no power, nor does it undertake, to enforce or certify compliance with this document. Any certification or other statement of compliance with the requirements of this Standard Practice shall not be attributable to MSS and is solely the responsibility of the certifier or maker of the statement.

*“Unless indicated otherwise within this MSS Standard Practice, other standards documents referenced to herein are identified by the date of issue that was applicable to this Standard Practice at the date of approval of this MSS Standard Practice (see Annex B). This Standard Practice shall remain silent on the validity of those other standards of prior or subsequent dates of issue even though applicable provisions may not have changed.”*

By publication of this Standard Practice, no position is taken with respect to the validity of any potential claim(s) or of any patent rights in connection therewith. MSS shall not be held responsible for identifying any patent rights. Users are expressly advised that determination of patent rights and the risk of infringement of such rights are entirely their responsibility.

In this Standard Practice, all text, notes, annexes, tables, figures, and references are construed to be essential to the understanding of the message of the standard, and are considered normative unless indicated as “supplemental”. All appendices, if included, that appear in this document are construed as “supplemental”. Note that supplemental information does not include mandatory requirements.

The (SI) metric units and U.S. customary units in this Standard Practice are regarded separately as the standard; each should be used independently of the other. Combining or converting values between the two systems may result in non-conformance with this Standard Practice.

Substantive changes in this 2013 edition are “flagged” by parallel bars as shown on the margins of this paragraph. The specific detail of the change may be determined by comparing the material flagged with that in the previous edition.

Non-toleranced dimensions in this Standard Practice are nominal unless otherwise specified.

*Excerpts of this Standard Practice may be quoted with permission. Credit lines should read ‘Extracted from MSS SP-42-2013 with permission of the publisher, Manufacturers Standardization Society of the Valve and Fittings Industry’. Reproduction and/or electronic transmission or dissemination is prohibited under copyright convention unless written permission is granted by the Manufacturers Standardization Society of the Valve and Fittings Industry Inc. All rights reserved.*

Originally Published: October 1949

Current Edition Approved: October 2012 (Updated March 2013)

Current Edition Published: May 2013

MSS is a registered trademark of Manufacturers Standardization Society of the Valve and Fittings Industry, Inc.

Copyright ©, 2013 by  
Manufacturers Standardization Society  
of the  
Valve and Fittings Industry, Inc.

Printed in U.S.A.

**TABLE OF CONTENTS**

<b><u>SECTION</u></b>	<b><u>PAGE</u></b>
1 SCOPE .....	1
2 STANDARD UNITS .....	1
3 MATERIALS .....	1
4 DESIGN .....	2
5 PRESSURE-TEMPERATURE RATINGS .....	7
6 WORKMANSHIP .....	8
7 TESTS .....	8
8 MARKING .....	8
9 PAINTING .....	8

**TABLE**

1 Minimum Diameter of Stems .....	9
2 Stuffing Box Dimensions .....	10

**FIGURE**

A1 Gate Valves .....	11
A2 Globe Valves .....	11
A3 Y-Pattern Globe Valve .....	11
A4 Angle Valve .....	11
A5 Lift Check Valve, Bolted Cover Plate .....	12
A6 Swing Check Valve, Bolted Cover Plate .....	12
A7 Y-Pattern Swing Check Valve, Threaded Cover Plate .....	12
A8 Y-Pattern Swing Check Valve, Bolted Cover Plate .....	12

**ANNEX**

A Valve Types – Figures A1 through A8 .....	11
B Referenced Standards and Applicable Dates .....	13