

Connecting Flange Joints between Tapping Sleeves and Tapping Valves

Standard Practice
Developed and Approved by the
Manufacturers Standardization Society of the
Valve and Fittings Industry, Inc.
127 Park Street, NE
Vienna, Virginia 22180-4602
Phone: (703) 281-6613
Fax: (703) 281-6671
E-mail: standards@msshq.org



www.msshq.org

This MSS Standard Practice was developed under the consensus of the MSS Technical Committee 112, *Water Works Valves & Fittings*, and the MSS Coordinating Committee. The content of this Standard Practice is the resulting efforts of knowledgeable and experienced industry 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 industry at large. It is the responsibility of the user of this Standard Practice to establish appropriate safety and health practices and determine the applicability of regulatory requirements prior to use. 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 A). 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.

For all MSS Standard Practices, the term “shall” means “must” and “shall not” means “must not”.

In this Standard Practice, all text, notes, annexes, tables, figures, and references are construed to be “normative” and essential to understand the standard’s message. All appendices and footnotes, or any other information denoted as “supplemental”, that may be included within this Standard Practice, DO NOT involve mandatory or normative requirements.

The U.S. customary units and SI (metric) units included within this Standard Practice are regarded separately as the standard; each should be used independently of the other and may not be technically equivalent. Combining or converting values or tolerances between the two systems may result in non-conformance with this Standard Practice.

Substantive changes in this 2021 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 2017 edition.

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

Excerpts of this Standard Practice may be quoted with written permission. Credit lines should read ‘Extracted from MSS SP-60-2021 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: June 1960
Current Edition Approved: May 2021
Current Edition Published: July 2021

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

Copyright ©, 2021 by
Manufacturers Standardization Society
of the
Valve and Fittings Industry, Inc.
Printed in U.S.A.

PREFACE

Technical Committee Membership

The MSS Technical Committee 112, *Water Works Valves & Fittings*, has primary responsibility for this Standard Practice and included the following members at the time of approval:

Randy Looney, Chair
Chad Harbour, Vice-Chair

Brian Allen, Flomatic Corporation, Inc.

Mitchell Anderson, Bray International, Inc.

Tommy Baldwin, Wey Valve, Inc.

Kevin Bartell, Conbraco Industries, Inc.

Patrick Berken, American Valve and Hydrant Manufacturing Company

Wayne Biery, Victaulic Company of America

John Bolender, J & S Valve, Inc.

Dan Burczynski, Kennedy Valve

Matthew Coffey, Ward Manufacturing, LLC

Ron R. Collins, JCM Industries, Inc.

Zach Cresap, Wey Valve, Inc.

Stephen Dalton, Val-Matic Valve and Manufacturing Corp.

Carlos E. Davila, Pe, Crane Chempharma & Energy

Jean-Paul "Jp" Fay, Viega LLC

Leo Fleury, Mueller Co. LLC

Paul Gifford, Mueller Co. LLC

G. Goodson, Conbraco Industries, Inc.

Jerry Grant, Dezurik, Inc.

Chad Harbour, Mueller Co. LLC

John Helf, American Flow Control

Peter Hirst, Rotork Controls, Inc.

Bryce Hughbanks, Viega LLC

Kirk Johnson, M & H Valve Company

David Johnston, EJ, Inc.

Roland L. Larkin, J & S Valve, Inc.

Al Libke, Dezurik, Inc.

Randy Looney, American AVK Company

Jeff Matson, Viega LLC

Travis Miles, Wey Valve, Inc.

Frank Morrell, American Valve and Hydrant Manufacturing Company

Tim Narel, Milwaukee Valve Company

Allan Nelson, Waterous Company

Tim O'Shea, Val-Matic Valve and Manufacturing Corp.

Derek Oldsen, Nibco, Inc.

Doug Peirce, Clow Valve Company

Bradd Ripley, Victaulic Company of America

Chris Robbins, Waterous Company

Derek Scott, American Flow Control

Steve Smick, Mueller Co. LLC

Keith Spaulding, Bray International, Inc.

Kevin Swicegood, Flowsolve Corp.

James Tubb, JCM Industries, Inc.

Foster Voelker, William E. Williams Valve Corporation

John Wilber, American AVK Company

David Woollums, U.S. Pipe

Mike Zampogna, Dresser Pipeline Solutions

This Page Intentionally Left Blank

Manufacturers Standardization Society of the Valve and Fittings Industry

TABLE OF CONTENTS

SECTION

	PURPOSE	1
1	SCOPE	1
2	DEFINITIONS	1
3	PRESSURE-TEMPERATURE RATING	3
4	FLANGE DIMENSIONS	3
5	FLANGE ALIGNMENT	3
6	FLANGE GASKET	3

TABLE

1	Recess in Tapping Sleeve Flange	4
2	Raised Face or Lip of Tapping Valve	5

FIGURE

1	Tapping Components	2
---	--------------------------	---

ANNEX

A	Referenced Standards and Applicable Dates	6
---	---	---

Purchase or View a Full Listing of MSS Standards at:

<http://msshq.org/Store/PriceList.cfm>

MSS Standard Practices (SPs) related to or referenced in this publication:

MSS SP-86	<i>Recommended Rules and Guidelines for SI (Metric) Data in MSS Standards</i>
ANSI/MSS SP-96	<i>Terminology for Valves, Fittings, and Their Related Components</i>
MSS SP-111	<i>Gray-Iron and Ductile-Iron Tapping Sleeves</i>
MSS SP-113	<i>Connecting Joints between Tapping Machines and Tapping Valves</i>
MSS SP-124	<i>Fabricated Tapping Sleeves</i>

American National Standards Published by MSS, an ANSI-accredited Standards Developer:

ANSI/MSS SP-25	<i>Standard Marking System for Valves, Fittings, Flanges, and Unions</i>
ANSI/MSS SP-44	<i>Steel Pipeline Flanges</i>
ANSI/MSS SP-55	<i>Quality Standard for Steel Castings for Valves, Flanges, Fittings, and Other Piping Components – Visual Method for Evaluation of Surface Irregularities</i>
ANSI/MSS SP-58	<i>Pipe Hangers and Supports – Materials, Design, Manufacture, Selection, Application, and Installation</i>
ANSI/MSS SP-96	<i>Terminology for Valves, Fittings, and Their Related Components</i>
ANSI/MSS SP-114	<i>Corrosion Resistant Pipe Fittings Threaded and Socket Welding Class 150 and 1000</i>
ANSI/MSS SP-122	<i>Plastic Industrial Ball Valves</i>
ANSI/MSS SP-134	<i>Valves for Cryogenic Service, including Requirements for Body/Bonnet Extensions</i>
ANSI/MSS SP-135	<i>High Pressure Knife Gate Valves</i>
ANSI/MSS SP-138	<i>Quality Standard Practice for Oxygen Cleaning of Valves and Fittings</i>
ANSI/MSS SP-144	<i>Pressure Seal Bonnet Valves</i>

Do not violate copyright laws

All Standard Practices are officially available only from MSS and through our authorized distributors:



TECHSTREET

SAI GLOBAL



afnor
PUBLISHING



normdocs



About MSS

The Manufacturers Standardization Society (MSS) of the Valve and Fittings Industry is a non-profit technical association organized for development and improvement of industry, national and international codes and standards for Valves, Valve Actuators, Valve Modifications, Pipe Fittings, Flanges, Pipe Hangers and Supports, and Associated Seals. Since its establishment in 1924, MSS has been dedicated to developing standards for national and global applications, in cooperation with other standardizing bodies and regulatory authorities. **MSS is an American National Standards Institute (ANSI)-accredited standards developer.**

For more information on membership and eligibility requirements, visit: <http://msshq.org/Store/Membership.cfm>



Manufacturers Standardization Society of the Valve and Fittings Industry, Inc.
127 Park Street, NE, Vienna, VA 22180-4620 • Phone (703) 281-6613 • Fax (703) 281-6671

“The Technical Voice of the Industry”