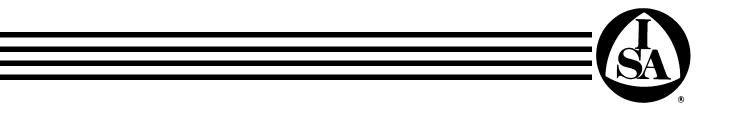
ISA-S75.22-1992(R1996)

Reaffirmed December 20, 1996

Face-to-Centerline Dimensions for Flanged Globe-Style Angle Control Valve Bodies (ANSI Classes 150, 300, and 600)



ISA-S75.22 — Face-to-Centerline Dimensions for Flanged Globe-Style Angle Control Valve Bodies

ISBN 1-55617-387-3

Copyright © 1992 by the Instrument Society of America. All rights reserved. Printed in the United States of America. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), without the prior written permission of the publisher.

ISA 67 Alexander Drive P.O. Box 12277 Research Triangle Park, North Carolina 27709

Preface

This preface is included for information purposes and is not part of ISA-S75.22.

This standard has been prepared as part of the service of ISA toward a goal of uniformity in the field of instrumentation. To be of real value, this document should not be static, but should be subject to periodic review. Toward this end, the Society welcomes all comments and criticisms, and asks that they be addressed to the Secretary, Standards and Practices Board, ISA, 67 Alexander Drive, P.O. Box 12277, Research Triangle Park, NC 27709, Telephone (919) 549-8411, Fax (919) 549-8288, e-mail: standards@isa.org.

The ISA Standards and Practices Department is aware of the growing need for attention to the metric system of units in general, and the International System of Units (SI) in particular, in the preparation of instrumentation standards. The Department is further aware of the benefits to U.S.A. users of ISA Standards of incorporating suitable references to the SI (and the metric system) in their business and professional dealings with other countries. Toward this end, this Department will endeavor to introduce SI-acceptable metric units in all new and revised standards to the greatest extent possible. *The Metric Practice Guide,* which has been published by the Institute of Electrical and Electronic Engineers as ANSI/IEEE Std. 268-1982, and future revisions, will be the reference guide for definitions, symbols, abbreviations, and conversion factors.

It is the policy of the ISA to encourage and welcome the participation of all concerned individuals and interests in the development of ISA standards. Participation in the ISA standards-making process by an individual in no way constitutes endorsement by the employer of that individual, of the ISA, or of any of the standards that ISA develops.

The information contained in the preface, footnotes, and appendices is included for information only and is not a part of the standard.

COMPANY

The following people served as members of ISA Committee SP75.08 (formerly SP4.1):

NAME

W. C. Weidman, Chairman	Gilbert/Commonwealth, Inc.
H. D. Baumann	H. D. Baumann & Associates, Ltd.
G. Borden, Jr.	Consultant
R. R. Brodin	Fisher Controls International, Inc.
F. M. Cain	Valtek, Inc.
R. Chown	OTEC
J. T. Emery	Honeywell, Inc.
B. A. Hart	M. W. Kellogg Company
H. Illing	DeZurik Valve Company
C. I. Koloboff	Chevron Research & Technology Company
J. D. Leist	Dow Chemical USA
J. N. Reed	Masoneilan/Dresser
H. Schwartz	Flexible Valve Corporation
A. B. Scott	Neles-Jamesbury
H. R. Sonderegger	Grinnell Corporation
R. U. Stanley	Retired
R. F. Tubbs	Copes-Vulcan-Charlotte

The following people served as members of ISA Committee SP75:

NAME

D. L. Buchanan*, Chairman
W. C. Weidman, Managing Director
T. Abromaitis
J. B. Arant
H. E. Backinger
G. E. Barb
H. D. Baumann
H. W. Boger
G. Borden, Jr. S. J. Boyle*
R. R. Brodin*
E. H. C. Brown
F. M. Cain
C. F. Corson
L. R. Driskell
J. T. Emery
H. J. Fuller
L. F. Griffith
B. A. Hart
F. P. Harthun* J. S. Herold
H. Illing
R. L. Jeanes
C. I. Koloboff
J. D. Leist
R. A. Louviere
O. P. Lovett, Jr.
J. W. McCaskill
A. P. McCauley, Jr.
H.L. Miller
T. V. Molloy L. J. Ormanoski
J. Ozol
W. Rahmeyer
G. Richards
T. Rutter
K. G. Schoonover
H. Schwartz
A. B. Scott*
H. R. Sonderegger
R. U. Stanley
R. E. Terhune R. F. Tubbs
R. L. Widdows
L. R. Zinck*

COMPANY

Union Carbide Corporation Gilbert/Commonwealth, Inc. Red Valve, Inc. JBA Consulting Company J.F. Kraus & Company Anchor/Darling Valve Company H.D. Baumann & Associates, Ltd. Masoneilan/Dresser Consultant Neles-Jamesbury, Inc. Fisher Controls International, Inc. Dravco McKee Valtek, Inc. Fluor Daniel Consultant Honeywell, Inc. Consultant Consultant M.W. Kellogg Company Fisher Controls International, Inc. Retired DeZurik Valve Company **Texas Utilities Electric** Chevron Research & Technology Company **Dow Chemical USA Creole Engineering Sales Company** Retired Leslie Controls Chagrin Valley Controls, Inc. Control Components, Inc. Pacific Gas & Electric Frick Company **Commonwealth Edison Utah State University** Richards Industries, Inc. Fluid Controls Institute, Inc. Con-Tek Flexible Valve Corporation **Neles-Jamesbury** Grinnell Corporation Retired Consultant Copes-Vulcan-Charlotte Cashco, Inc. Union Carbide Corporation

^{*}One vote per company

This standard was approved for publication by the ISA Standards and Practices Board in January 1992.

NAME

J. Rennie H. D. Baumann D. N. Bishop C. R. Gross H. S. Hopkins K. P. Lindner G. R. McFarland A. P. McCauley Jr. E. M. Nesvia R. D. Prescott D. E. Rapley R. H. Reimer R. C. Webb W. C. Weidman J. R. Whetstone K. A. Whitman M. A. Widmeyer C. A. Williams P. Bliss** W. Calder, III** L. N. Combs** N. L. Conger** T. J. Harrison** R. T. Jones** R. E. Keller** E. C. Magison** R. G. Marvin** W. B. Miller** J. W. Mock** G. Platt** Kirk Whitman** J. R. Williams**

COMPANY

Factory Mutual Research Corporation H.D. Baumann & Associates, Ltd. Chevron USA. Inc. **Dow Chemical USA** Utility Products of Arizona Endress & Hauser GmbH & Company ABB Power Automation, Inc. Chagrin Valley Controls, Inc. **ERDCO Engineering Corporation** Moore Products Company **Rapely Engineering Services** Allen-Bradley Company Pacific Gas & Electric Company Gilbert/Commonwealth, Inc. National Institute of Standards and Technology **ABB** Combustion Engineering The Supply System Eastman Kodak Company Consultant The Foxboro Company Consultant Consultant Florida State University Consultant Consultant Honeywell, Inc. Consultant Moore Products Company **Bechtel Western Power Corporation** Consultant **ABB** Combustion Engineering Consultant

^{**}Directors Emeriti

Contents

1 Scope	9
2 Purpose	9
3 Definition	9
4 Bibliography	9
5 Dimensional data	

1 Scope

This standard applies to raised-face flanged globe-style angle control valves, 1 inch through 8 inches.

2 Purpose

The purpose of this standard is to aid users in their piping design by providing ANSI classes 150, 300, and 600 raised-face flanged globe-style angle control valve face-to-centerline dimensions without giving special considerations to the equipment manufacturer to be used.

3 Definition

raised-face flanged globe-style angle control valve: A valve design in which one port is colinear with the valve stem or actuator, and the other port (usually the inlet) is at right angles to the valve stem.

4 Bibliography

The following bibliography is included for the definition of pressure classes, flange dimensions, material identification, and cross reference. Items 4.1 and 4.2 are published by ASME (American Society of Mechanical Engineers).

4.1 American National Standards Institute, Inc. (ANSI) Standard B16.5-1988, "Pipe Flanges and Flanged Fittings."

4.2 American National Standards Institute, Inc. (ANSI) Standard B16.34-1988, "Valves – Flanged, Threaded, and Welding End."

5 Dimensional data

For face-to-centerline dimensions for raised-face globe-style angle control valves, see Table 1.

Nomina	al valve	Dimensions A and B *							
size		Class 150		Class 300		Class 600		Tolerance	
mm	inches	mm	inches	mm	inches	mm	inches	mm	inches
25	1	92	3.62	99	3.88	105	4.12	±01.6	±0.062
40	1 ½	111	4.37	117	4.62	125	4.94	±01.6	±0.062
50	2	127	5.00	133	5.25	143	5.62	±01.6	±0.062
80	3	149	5.88	159	6.25	168	6.62	±01.6	±0.062
100	4	176	6.94	184	7.25	197	7.75	±01.6	±0.062
150	6	226	8.88	236	9.31	254	10.00	±01.6	±0.062
200	8	272	10.69	284	11.19	305	12.00	±01.6	±0.062

Table 1 — Angle valves

* See Figure 1

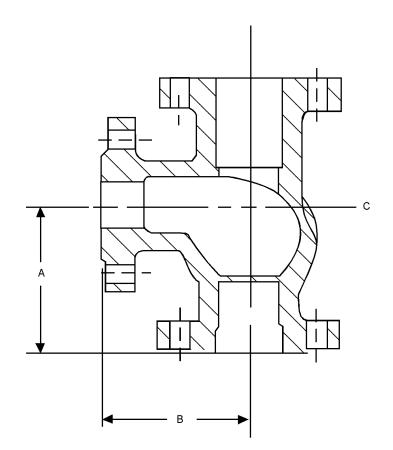


Figure 1 — Dimensions A and B and centerline

Developing and promulgating technically sound consensus standards, recommended practices, and technical reports is one of ISA's primary goals. To achieve this goal the Standards and Practices Department relies on the technical expertise and efforts of volunteer committee members, chairmen, and reviewers.

ISA is an American National Standards Institute (ANSI) accredited organization. ISA administers United States Technical Advisory Groups (USTAGs) and provides secretariat support for International Electrotechnical Commission (IEC) and International Organization for Standardization (ISO) committees that develop process measurement and control standards. To obtain additional information on the Society's standards program, please write:

> ISA Attn: Standards Department 67 Alexander Drive P.O. Box 12277 Research Triangle Park, NC 27709

> > ISBN: 1-55617-387-3