

GP 15-09-01	Control Valves	December 2001
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Control Valves

GP 15-09-01

Scope

- 1) [I] This Global Practice (GP) covers the design and inspection of all types of valves used for control, both throttling and on-off services. Gate valves are specifically excluded.
- 2) [I] Diaphragm and piston actuators, positioners and ancillaries for control valves are covered by this GP. Motor actuators are covered by [GP 15-09-02](#).
- 3) [I] An asterisk (*) indicates that a decision by the Owner's Engineer or Purchaser is required, that additional information is to be furnished by the Owner's Engineer, or that information for Owner's Engineer approval is to be supplied by Vendor or Purchaser.

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Page 1 of 16	©ExxonMobil Development Company	 Documents Document Sharing Hub

GP 15-09-01	Control Valves	December 2001
-------------	----------------	---------------

Table of Contents

1. Required References	4
1.1. Global Practices–ExxonMobil Engineering Practices	4
1.2. ISA–Instrumentation, Systems, and Automation Society	4
1.3. FCI–Fluid Controls Institute, Inc.	4
1.4. ASME–American Society of Mechanical Engineers	4
1.5. API–American Petroleum Institute	5
1.6. MSS–Manufacturers Standardization Society of the Valve and Fittings Industry	5
2. Additional Requirements	5
2.1. Global Practices–ExxonMobil Engineering Practices	5
2.2. ASME–American Society of Mechanical Engineers	5
2.3. ASTM–American Society for Testing and Materials	6
2.4. SFS–Finnish Standards Association	6
2.5. U.S. Code of Federal Regulations	6
3. Materials	6
4. Valve Design	8
4.1. General	8
4.2. Characteristics	10
4.3. Sizing	10
4.4. Additional Requirements	11
4.5. Self-Acting Regulating Valves	12
4.6. Environmental Protection	12
5. Actuators, Positioners, and Valve Ancillaries	12
5.1. Actuators	12
5.2. Stem and Shaft Linkages	13
5.3. Handwheels	13
5.4. Positioners	13
5.5. Transducers	13
5.6. Air Locks	14
5.7. Volume Boosters / Quick Exhaust Vents	14
5.8. Limit Switches	14

DNST, CHEM, DIOL	For ExxonMobil Use Only	Version 1.1.0
Page 2 of 16	©ExxonMobil Development Company	 Documents Document Sharing Hub

GP 15-09-01	Control Valves	December 2001
-------------	----------------	---------------

6. Inspection and Testing.....	14
7. Additional Material Requirements.....	15
8. Identification	15
Record of Change	16
Attachment: Purpose Codes Definitions	17

DNST, CHEM, DIOL	For ExxonMobil Use Only	Version 1.1.0
Page 3 of 16	©ExxonMobil Development Company	



Documents

Document Sharing Hub

GP 15-09-01	Control Valves	December 2001
-------------	----------------	---------------

1. Required References

[I] This Section lists Practices and Standards that are generically referenced and assumed to be a part of this document. Unless otherwise specified herein, use the latest edition.

1.1. Global Practices–ExxonMobil Engineering Practices

GP 03-12-09	General Requirements for Valves
GP 03-16-01	Flanged Joints, Gaskets, and Bolting
GP 03-06-02	Piping at Control and Protective System Valve Stations
GP 14-03-01	Fireproofing
GP 16-01-01	Area Classification and Related Electrical Design for Flammable Liquids, Gases or Vapors
GP 20-01-01	Inspection of Equipment and Materials

1.2. ISA–Instrumentation, Systems, and Automation Society

ISA 75.01	Flow Equations for Sizing Control Valves
ISA 75.03	Face-to-Face Dimensions for Integral Flanged Globe-Style Control Valve Bodies (Classes 125, 150, 250, 300, and 600) Formerly ISA 75.03
ISA 75.04	Face-to-Face Dimensions for Flangeless Control Valves (ANSI Classes 150, 300, and 600)
ISA 75.17	Control Valve Aerodynamic Noise Prediction
ISA RP75.23	Considerations for Evaluating Control Valve Cavitation

1.3. FCI–Fluid Controls Institute, Inc.

FCI 70-2	Control Valve Seat Leakage
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1.4. ASME–American Society of Mechanical Engineers

ASME B16.11	Forged Fittings, Socket-Welding and Threaded
ASME B16.34	Valves - Flanged, Threaded, and Welding End

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Page 4 of 16	©ExxonMobil Development Company	



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GP 15-09-01	Control Valves	December 2001
-------------	----------------	---------------

1.5. API–American Petroleum Institute

API RP 17A	Recommended Practice for Design and Operation of Subsea Production Systems
API RP 553	Refinery Control Valves
API STD 609	Butterfly Valves: Double Flanged, Lug- and Wafer-Type

1.6. MSS–Manufacturers Standardization Society of the Valve and Fittings Industry

MSS SP-25	Standard Marking System for Valves, Fittings, Flanges and Unions
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2. Additional Requirements

- 1) * [I] Valve ancillaries such as limit switches, positioners and relays, shall be furnished mounted on the control valve, unless specified otherwise.
- 2) [S], [I] Valves used in protective systems shall be in accordance with [GP 15-07-02](#).
- 3) * [I] The following Practices and Standards shall be used with this GP as specified by the Owner's Engineer.

2.1. Global Practices–ExxonMobil Engineering Practices

GP 02-01-01	Plant Noise Design Criteria
GP 03-12-01	Valve Selection
GP 15-07-02	Protective Systems
GP 15-09-02	Electric Motor Operators for Valves
GP 18-03-04	Pressure Casting Quality and Inspection
GP 18-10-01	Additional Requirements for Materials
GP 18-12-01	Positive Material Identification
GP 19-01-01	Paint and Protective Coatings

2.2. ASME–American Society of Mechanical Engineers

ASME B31.3	Process Piping
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Page 5 of 16	©ExxonMobil Development Company	



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