



PROCESS  
INDUSTRY  
PRACTICES

TECHNICAL CORRECTION  
*June 2020*

***Piping***

**PIP PNSMV003**  
**Carbon Steel Gate Valve Descriptions**

---

## PURPOSE AND USE OF PROCESS INDUSTRY PRACTICES

In an effort to minimize the cost of process industry facilities, this Practice has been prepared from the technical requirements in the existing standards of major industrial users, contractors, or standards organizations. By harmonizing these technical requirements into a single set of Practices, administrative, application, and engineering costs to both the purchaser and the manufacturer should be reduced. While this Practice is expected to incorporate the majority of requirements of most users, individual applications may involve requirements that will be appended to and take precedence over this Practice. Determinations concerning fitness for purpose and particular matters or application of the Practice to particular project or engineering situations should not be made solely on information contained in these materials. The use of trade names from time to time should not be viewed as an expression of preference but rather recognized as normal usage in the trade. Other brands having the same specifications are equally correct and may be substituted for those named. All Practices or guidelines are intended to be consistent with applicable laws and regulations including OSHA requirements. To the extent these Practices or guidelines should conflict with OSHA or other applicable laws or regulations, such laws or regulations must be followed. Consult an appropriate professional before applying or acting on any material contained in or suggested by the Practice.

This Practice is subject to revision at any time.

© Process Industry Practices (PIP), Construction Industry Institute, The University of Texas at Austin, 3925 West Braker Lane (R4500), Austin, Texas 78759. PIP Member Companies and Subscribers may copy this Practice for their internal use. Changes or modifications of any kind are not permitted within any PIP Practice without the express written authorization of PIP. Authorized Users may attach addenda or overlays to clearly indicate modifications or exceptions to specific sections of PIP Practices. Authorized Users may provide their clients, suppliers and contractors with copies of the Practice solely for Authorized Users' purposes. These purposes include but are not limited to the procurement process (e.g., as attachments to requests for quotation/ purchase orders or requests for proposals/contracts) and preparation and issue of design engineering deliverables for use on a specific project by Authorized User's client. PIP's copyright notices must be clearly indicated and unequivocally incorporated in documents where an Authorized User desires to provide any third party with copies of the Practice.

### **PRINTING HISTORY**

<i>October 1995</i>	<i>Issued</i>	<i>April 2001</i>	<i>Revision</i>	<i>February 2015</i>	<i>Technical Revision</i>
<i>February 1997</i>	<i>Revision</i>	<i>November 2003</i>	<i>Technical Revision</i>	<i>September 2018</i>	<i>Complete Revision</i>
<i>June 1998</i>	<i>Revision</i>	<i>November 2005</i>	<i>Technical Revision</i>	<i>June 2020</i>	<i>Technical Correction</i>
<i>February 1999</i>	<i>Complete Revision</i>	<i>June 2006</i>	<i>Technical Revision</i>		
<i>May 2000</i>	<i>Revision</i>	<i>March 2010</i>	<i>Complete Revision</i>		

Not printed with State funds



## PIP PNSMV003 Carbon Steel Gate Valve Descriptions

---

### Table of Contents

<b>1. Scope .....</b>	<b>2</b>
<b>2. References .....</b>	<b>2</b>
2.1 Process Industry Practices .....	2
<b>3. Valve Designation System .....</b>	<b>2</b>
<b>4. Notes .....</b>	<b>2</b>
<b>5. Cross Reference .....</b>	<b>3</b>
<b>6. Valve Descriptions.....</b>	<b>5</b>

## 1. Scope

---

This Practice provides the detailed purchase descriptions for carbon steel gate valve tag numbers included in PIP Piping Material Specifications and used along with *PIP PNSM0110* for the procurement of valves. This Practice also provides a cross reference for carbon steel gate valve tag numbers to applicable PIP Piping Material Specifications.

## 2. References

---

Applicable parts of the following Practices shall be considered an integral part of this Practice. The edition in effect on the date of contract award shall be used, except as otherwise noted. Short titles will be used herein where appropriate.

### 2.1 Process Industry Practices (PIP)

- PIP PNCM0004 - *Valve Commodity Codes Designator System*
- PIP PNC00005 - *Design of ASME B31.3 Metallic Piping Systems*
- PIP PNSM0110 - *Purchasing Requirements for Valves*

## 3. Valve Designation System

---

- 3.1 For a full explanation of the format used to structure the valve tag numbers listed within this Practice, refer to *PIP PNCM0004*. The first two characters in the valve tag numbers are GA.
- 3.2 The valves listed in Section 5 and Section 6 of this Practice are sorted by the unique valve tag number designation in ascending alphanumeric sequence (e.g., GA01CA500, GA01CA501, GA01CB500, GA01CB501, GA03CA500).

## 4. Notes

---

- 4.1 Occasionally, valve size ranges listed in this Practice are broader than the size ranges shown for the same valves on a PIP Piping Material Specification. While the “most common practice” has been used to specify valve size ranges on Piping Material Specifications, a purchaser may need to utilize a valve in a size outside this “common practice” choice. Thus, for reference purposes, the full size range for which a given valve is typically manufactured is shown in this Practice.
- 4.2 Gear operation may be specified in either of the following ways:
  - a. Select a valve description that includes a gear operator
  - b. Select a valve description that includes a handwheel and use Field 5 (Owner Designation) of the valve tag numbering system described in *PIP PNCM0004*. For guidance, see *PIP PNC00005*, Section 3.5.5.2.
- 4.3 If fluids can be trapped (e.g., in double-seated valves) and subjected to heating and subsequent expansion, means of pressure relief shall be considered to avoid excessive pressure build-up.
- 4.4 Procurement of valves shall include the detailed purchase descriptions given in this Practice, along with the requirements in *PIP PNSM0110* and the purchase order.