PROCESS INDUSTRY PRACTICES

COMPLETE REVISION
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Piping

PIP PNSMV007
Carbon Steel Butterfly 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.

PUBLISHING HISTORY

May 2000	*Issued*	*November 2005*	*Technical Revision*	*October 2017*	*Complete Revision*
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1. Scope

This Practice provides requirements for suppliers providing carbon steel butterfly valves included in PIP Piping Line Class Material Specifications.

2. References

Applicable parts of the following Practice and industry codes and standards 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*

2.2 Industry Codes and Standards

- American Petroleum Institute (API)
  – API 6FA - *Specification for Fire Test for Valves*
  – API 607 - *Fire Test for Soft-Seated Quarter-Turn Valve*

3. Valve Designation System

3.1 For a full explanation of the format used to structure the valve numbers listed within this Practice, refer to *PIP PNCM0004.*

3.2 This Practice provides descriptions for butterfly valves. Therefore, the first two characters in the valve numbers are BF.

3.3 The valves listed in Section 5 and Section 6 of this Practice are sorted by the unique valve number designation in ascending alphanumeric sequence (e.g., BF01CA700, BF01CA701, BF01CB700, BF01CB701, BF03CA700).

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 given piping line class specification. While the “most common practice” has been used to specify valve size ranges on line class 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 operators are specified in some, but not all, butterfly valve descriptions. If not specified in the valve description, the purchaser shall specify that gear operators are needed. One method of specifying this need is by using Field 5 of the valve designation system as described in *PIP PNCM0004.*

4.3 Many butterfly valve manufacturers offer numerous handle options (e.g., locking/nonlocking, latching/nonlatching, oval, tee). As a default, valve descriptions within this Practice specify a 10-position ratchet lever with lockout. The purchaser shall specify a different handle option if required.

5. Cross Reference

Valve Number	Applicable Line Classes
BF01CA700	1CA1S01
BF01CA701	1CA1S01
BF01CA702	1CA1S01
BF01CB700	1CB1S01, 1CB2S01, 1CS1S01, 1CS2S01, 1CS1B02
BF01CB701	1CB1S01, 1CB2S01, 1CS1S01, 1CS2S01, 1CS1B02
BF01CB702	1CB1S01, 1CB2S01, 1CS1S01, 1CS2S01, 1CS1B02
BF03CA700	3CA1S01
BF03CA701	3CA1S01
BF03CB700	3CB1S01, 3CB2S01, 3CS1B01, 3CS2B01, 3CS1S01, 3CS2S01
BF03CB701	3CB1S01, 3CB2S01, 3CS1B01, 3CS2B01, 3CS1S01, 3CS2S01
BF06CA700	6CA1S01
BF06CA701	6CA1S01
BF06CB700	6CB1S01, 6CB2S01
BF06CB701	6CB1S01, 6CB2S01