PROCESS INDUSTRY PRACTICES

COMPLETE REVISION
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Piping

PIP PNSMV027
Stainless 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

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

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

2. References

Applicable parts of the following Practices 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.

3.2 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., BF01ST501, BF01SV701, BF06ST510).

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 piping line class material specification. While the “most common practice” has been used to specify valve size ranges on piping 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
BF01ST510	1SA0S04
BF01ST700	1SA0B03, 1SA0S01, 1SA0S03, 1SD0B03, 1SD0S01, 1SD1B01
BF01ST701	1SA0B03, 1SA0S01, 1SA0S03, 1SD0B03, 1SD0S01, 1SD1B01
BF01ST702	1SA0B03, 1SA0S01, 1SA0S03, 1SD0B03, 1SD0S01, 1SD1B01
BF01ST703	1SA0B03, 1SA0S01, 1SA0S03, 1SD0B03, 1SD0S01, 1SD1B01
BF01ST704	1SA0B03, 1SD0B03, 1SD0S01, 1SD1B01
BF01ST705	1SA0B02, 1SA0S02, 1SD0B02, 1SD0S02, 1SD1B02
BF01ST706	1SA0B02, 1SA0S02, 1SD0B02, 1SD0S02, 1SD1B02
BF01ST707	1SA0B02, 1SA0S02, 1SD0B02, 1SD0S02, 1SD1B02
BF01ST708	1SA0B02, 1SA0S02, 1SD0B02, 1SD0S02, 1SD1B02
BF01ST709	1SA0B02, 1SA0S02, 1SD0B02, 1SD0S02, 1SD1B02
BF01SV700	1SV0S01
BF01SV701	1SV0S01
BF03ST510	3SA0S04
BF03ST700	Replaced by BF03ST701
BF03ST701	3SA0B03, 3SA0S01, 3SA0S03, 3SD0B03, 3SD0S01, 3SD1B01
BF03ST702	Replaced by BF03ST703
BF03ST703	3SA0B03, 3SA0S01, 3SA0S03, 3SD0B03, 3SD0S01, 3SD1B01
BF03ST704	3SA0B03, 3SA0S01, 3SD0B03
BF03ST705	Replaced by BF03ST706
BF03ST706	3SA0B02, 3SA0S02, 3SD0B02, 3SD0S02, 3SD1B02
BF03ST707	Replaced by BF03ST708
BF03ST708	3SA0B02, 3SA0S02, 3SD0B02, 3SD0S02, 3SD1B02
BF03ST709	3SD0S02
BF03SV700	3SV0S01
BF06ST510	6SA0S04