

FLOATING BALL VALVE TECHNICAL SPECIFICATION

REF. NO.	BVTS0002	00	REV. NO.
DATE	25. APR. 2008		
SHEET	01	OF	04



SECTION 'A'

01. PRODUCT : FLOATING BALL VALVE - 'SINGLE', 'TWO', & 'THREE' PIECE.

02. SIZE & PRESSURE RATING : 'SINGLE' PIECE

DN015 TO DN250 - FB }
DN015 TO DN250 - RB } CLASS 150 & 300 - JACKETED

DN015 TO DN250 - RB CLASS 150 & 300 - WITHOUT JACKETED

DN008 TO DN040 - FB }
DN008 TO DN050 - RB } CLASS 600 - SE

: 'TWO' PIECE

DN015 TO DN250 - FB }
DN015 TO DN300 - RB } CLASS 150

DN015 TO DN200 - FB }
DN015 TO DN250 - RB } CLASS 300

DN015 TO DN080 - FB }
DN015 TO DN080 - RB } CLASS 600

: 'THREE' PIECE

DN008 TO DN050 - FB }
DN008 TO DN050 - RB } CLASS 600 & 800 - SE & SWE

DN008 TO DN040 - FB }
DN008 TO DN040 - RB } CLASS 1500 - SE & SWE

: 'TWO' PIECE - 'TWO' SEAT - 'THREE' WAY

DN050 TO DN150 - FB }
DN065 TO DN150 - RB } CLASS 150 & 300

: 'THREE' PIECE - 'TWO' SEAT - 'THREE' WAY

DN015 TO DN040 - FB }
DN015 TO DN050 - RB } CLASS 150 & 300

DN008 TO DN040 - FB }
DN008 TO DN050 - RB } CLASS 600 - SE & SWE

: 'THREE' PIECE - 'THREE' SEAT - 'THREE' WAY

DN015 TO DN050 - FB }
DN015 TO DN050 - RB } CLASS 150 & 300

DN008 TO DN050 - FB }
DN008 TO DN050 - RB } CLASS 600 - SE & SWE

03. STANDARDS :

DESIGN

: BS EN ISO 17292 (BS: 5351), API - 6D

FACE TO FACE DIMENSIONS

: FLANGED END

ASME B 16.10, API - 6D, EN 558-2 - BASIC SERIES 3

: BUTT WELD END, SOCKET WELD END, SCREWED END -

AS PER BDK STANDARD.

TESTING

: BS EN 12266 - 1 (2003) [BS 6755 - 1 (1986)], BS EN ISO : 17292 (2004),
API - 6D (2002), ASME B16.34 (2004), API: 598 (2004),
API : 607 5th EDITION (2005), API - 6FA 3rd EDITION (1999),
BS 6755 - 2 (1987), ISO : 5208 (1993) & FCI 70 - 2 (2006)

PRESSURE TEMPERATURE RATING : ASME B 16.34

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04. APPLICATIONS

: FOR HANDLING OF LIQUID, VAPOUR, GAS, STEAM & FLUID
IN PETROCHEMICALS, CHEMICAL AND OTHER
PROCESS INDUSTRIES

SECTION 'B'

01. TYPES OF END CONNECTION :

- A. FLANGED END
- B. BUTT WELD END WITH EXTENDED NIPPLE
- C. SOCKET WELD END
- D. SCREWED END

02. FLANGE FACING :

FLANGE FACING	Ra ROUGHNESS IN μM (μINCH)			
	UP TO 1.6 (63)	1.6 (63) TO 3.2 (125)	3.2 (125) TO 6.3 (250)	6.3 (250) TO 12.7 (500)
RAISED FACE	*	*	* 1)	*
FLAT FACE ²⁾	*	*	* 1)	*

* AVAILABLE IN TOTAL RANGE

1) BDK'S STANDARD UNLESS OTHERWISE SPECIFIED.

03. DRILLING VARIATIONS :

CLASS RATING	REFERENCE STANDARD
150, 300, 600	ASME B16.5
PN 10, 16, 40	EN 1092

04. BUTTWELD END VARIATIONS :

PIPE SCHEDULE	REFERENCE STANDARD
40, ¹⁾ 80	ASME B16.25

1) BDK'S STANDARD UNLESS OTHERWISE SPECIFIED.

05. SOCKET WELD END VARIATIONS :

PIPE SCHEDULE	REFERENCE STANDARD
40, ¹⁾ 80	ASME B16.11

1) BDK'S STANDARD UNLESS OTHERWISE SPECIFIED.

06. SCREWED END :

TYPE	REF. STANDARD
BSP (RP)	BS:21
BSPT (RC)	BS:21
NPT	ANSI / ASME B1.20.1

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07. VALVE OPERATION :

- a) LEVER
- b) WORM GEAR
- c) PNEUMATIC ACTUATOR
- d) ELECTRICAL ACTUATOR.

08. SHELL MATERIAL :

SPECIFICATION

(BODY & END PIECE)

WCB	ASTM A216 Gr. WCB
CF8	ASTM A351 Gr. CF8
CF8M	ASTM A351 Gr. CF8M
CF3	ASTM A351 Gr. CF3
CF3M	ASTM A351 Gr. CF3M
CN7M	ASTM A351 Gr. CN7M
CD4MCuN	ASTM A995 Gr. CD4MCuN
CD3MN (Gr.4A)	ASTM A995 Gr. CD3MN
LCB	ASTM A352 Gr. LCB
HAST - B	ASTM A494 Gr.N-12MV
HAST - C	ASTM A494 Gr.CW-12MW
MONEL	ASTM A494 Gr.M-35-1
904L	URANUS B6 SS904L (UB6)
# A105	ASTM A105
# LF2	ASTM A350 LF2
# F304	ASTM A182 Gr. F304
# F316	ASTM A182 Gr. F316
# FOR CLASS 800 ONLY.	

09. BALL/ STEM :

MATERIALS

CAST

WROUGHT

410	ASTM A217 Gr. CA15	ASTM A276 TP. 410
304	ASTM A351 Gr. CF8	ASTM A276 TP. 304
316	ASTM A351 Gr. CF8M	ASTM A276 TP. 316
304L	ASTM A351 Gr. CF3	ASTM A276 Gr. 304L
316L	ASTM A351 Gr. CF3M	ASTM A276 Gr. 316L
17-4 PH	ASTM A747 Gr. CB7Cu-1	ASTM A564 TP. 630 (17-4 PH)
MONEL	ASTM A494 Gr. M-35-1	ASTM B164 TP. 4400
S31803	ASTM A890 Gr. CD4MCu	UNS S31803

10. SEAT, STEM SEAL, BODY SEAL :

SEAT	PTFE / GFT / CFT / DELRIN / NYLON / PEEK
BODY SEAL, STEM SEAL	PTFE / GRAFOIL / SPW + GRAFOIL

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11. FASTENERS :

BODY TO END PIECE

- a) ASTM A276 TYPE 304
- b) ASTM A276 TYPE 316
- c) ASTM A193 Gr. B7 / ASTM A194 Gr.2H
- d) ASTM A193 Gr. B8M / ASTM A194 Gr.8M
- e) ASTM A320 Gr. L7 / ASTM A194 Gr.7

13. OPTIONAL FEATURES :

- LOCKING ARRANGEMENT
- MULTI PORT
- LIMIT SWITCH
- SOLENOID VALVE
- AIR FILTER REGULATOR
- POSITIONER
- STEM EXTENSION
- WELDED PUPS FOR SWE & BWE
- JACKETING FOR SINGLE PIECE
- VENT HOLE ON UPSTREAM
- POCKET LESS DESIGN

- NOTE :
- 1. FOR OTHER COMPONENTS & ITS MATERIALS, REFER RESPECTIVE SALES DRAWING OR CUSTOMER'S REQUIREMENTS.
 - 2. WHEREVER MATERIAL OPTIONS ARE GIVEN IN SALES DRG. S.C. DEPT. SHALL INDICATE THROUGH SALES DRG. TO PPC
 - 3. FOR ANY OTHER CLARIFICATION & SPL. REQUIREMENT CONSULT DESIGN & DEVP. DEPT.

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APPROVED BY :