

**BUTTERFLY VALVE  
MODEL-46,46L / 48,48L,48F  
TECHNICAL SPECIFICATION**

REF.NO.	BFTS0090	00	REV.NO.
DATE	16 MAY 2009		
SHEET	01	OF	03



**RUBBER LINED BODY**

**SECTION - A**

- 1. PRODUCT : BUTTERFLY VALVE, MODEL-46,46L / 48,48L / 48F.
- 2. ENDS : WAFER (MODEL - 46,48)  
LUGGED (MODEL - 46L,48L)  
FLANGED (MODEL - 48F)
- 3. PRESSURE RATING : PN16 FOR MODEL 46,46L  
: PN6 FOR MODEL 48,48L  
: PN10 FOR MODEL 48F
- 4. VACUUM : UPTO 2 TORR
- 5. STANDARDS
  - a) DESIGN : BS: 5155 / API 609
  - b) FACE-TO-FACE DIMENSIONS : BS: 5155-WAFER SHORT  
ISO : 5752  
API : 609, LOW PRESSURE
  - c) TESTING : BS EN 12266.
- 6. FLOW DIRECTION : BI-DIRECTIONAL

**7.APPLICATIONS:**

FOR HANDLING OF LIQUIDS, VAPOUR, GASES, STEAM & FLUIDS IN THERMAL POWER PLANTS AND OTHER PROCESS INDUSTRIES.

**SECTION - B**

- 1. VALVE SIZES : MODEL: 46,46L (DN50 TO DN600)  
MODEL: 48,48L (DN650 TO DN1200)  
MODEL: 48F (DN650 TO DN1200)

**2. TYPES OF END CONNECTIONS:**

- a) WAFER (MODEL - 46,48)
- b) LUGGED (MODEL - 48,48L)
- b) FLANGED (MODEL - 48F)

**3. TYPES OF END DETAILS:**

VALVES ARE SUITABLE TO SANDWICH BETWEEN FOLLOWING FLANGES (RF OR FF)

- ANSI B16.5, CL-150
- ANSI B16.1, CL-125
- EN: 1092, PN10 & PN16
- IS : 6392, TABLE-11 & TABLE-17
- BS : 10, TABLE - 'D' & 'E'

**4. VALVE OPERATIONS:**

- a) HAND LEAVER ( BDK'S STANDARD UNLESS OTHERWISE SPECIFIED, UP TO DN150)
- b) WORM GEAR - WITH HANDWHEEL
- c) WORM GEAR - WITH CHAIN WHEEL
- d) ELECTRICAL ACTUATOR
- e) PNEUMATIC ACTUATOR
- f) MANUAL OVERRIDE + PNEUMATIC ACTUATOR

PREPARED BY :

APPROVED BY :

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**5. BODY MATERIAL:**

<u>MATERIALS</u>	<u>SPECIFICATION</u>
DI	ASTM A536 Gr. 60-40-18
SGI	IS : 1865 Gr. 500/7
WCB	ASTM A 216 Gr. WCB

ALL BODIES ARE DULY P.U. COATED/STOVING ENAMEL COATED/POWDER COATED.

**6. DISC MATERIAL:**

<u>MATERIALS</u>	<u>SPECIFICATION</u>
DI	ASTM A 536 Gr. 60-40-18
SGI	IS : 1865 Gr. 500/7
CA15	ASTM A 217 Gr. CA15
CF8	ASTM A 351 Gr. CF8
CF8M	ASTM A 351 Gr. CF8M

NOTE : FOR RUBBER LINED DISC'S, SGI & WCB DISC INSERTS ARE USED, ( FOR MODEL-48 & 48L).  
 ALL DI & SGI UNLINED DISCS ARE DULY P.U. COATED / STOVING ENAMEL COATED / POWDER COATED.

**7. LINING MATERIALS:**

BODY	DISC (ONLY FOR M-48,48L PN 4 RATING)
NEOPRENE	NEOPRENE
NITRILE	NITRILE
EPDM	EPDM
HYPALON	HYPALON
BUTYL	BUTYL
	VITON
	SILICON

**8. STEM MATERIALS:**

<u>MATERIALS</u>	<u>SPECIFICATION</u>
410	ASTM A276 TYPE 410
304	ASTM A276 TYPE 304
316	ASTM A276 TYPE 316
MONEL	(FOR MODEL 46 & 46L ONLY)

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**9. O-RING MATERIALS:**

- a) NITRILE ( BDK'S STANDARD UNLESS OTHERWISE SPECIFIED )
- b) NEOPRENE
- c) VITON
- c) EPDM

**10. FASTENERS:**

- a) IS: 1367 Gr. 8.8/Gr. 8 (BDK'S STANDARD UNLESS OTHERWISE SPECIFIED.)
- b) ASTM A193 Gr. B7/ASTM A194 Gr. 2H

**11 OPTIONAL FEATURES:**

- a) STEM EXTENSIONS
- b) PADLOCK ARRANGEMENT
- c) LIMIT SWITCH ARRANGEMENT TO INDICATE EITHER "OPEN" OR "CLOSE" OR BOTH POSITIONS.

**NOTES:**

- 01. FOR OTHER COMPONENTS & ITS MATERIAL, REF RESPECTIVE SALES DRG. OR CUSTOMER'S REQUIREMENT.
- 02. WHEREVER MATERIAL OPTION ARE GIVEN IN SALES DRG. S.C. DEPARTMENT SHALL INDICATE THROUGH SALES DRG. TO PPC.  
FOR ANY OTHER CLARIFICATION AND SPL. REQUIREMENT CONSULT DESIGN & DEVELOPMENT DEPT.

PREPARED BY :

APPROVED BY :