

**BUTTERFLY VALVE  
MODEL - 85F  
TECHNICAL SPECIFICATIONS**

REF.NO.

BFTS0014

06  
REV.NO.

DATE

28 JUL 2000

SHEET

01

OF

03



**SECTION - A :**

1. PRODUCT : BUTTERFLY VALVE, MODEL-85F
2. ENDS : DOUBLE FLANGED
3. PRESSURE RATING : PN16, PN10, PN6 & PN2.5  
: AWWA C-504 CLASS - 150, 75 & 25
4. STANDARDS
  - a) DESIGN : BS:5155  
: AWWA C-504
  - b) FACE TO FACE : BS:5155 DOUBLE FLANGED SHORT  
AWWA C-504 SHORT BODY
  - c) TESTING : BS:6755 ( PART-1)  
: AWWA C-504
5. FLOW DIRECTIONS : UNI - DIRECTIONAL
6. APPLICATIONS:  
FOR HANDLING LIQUIDS, VAPOURS, GASES AND FLUIDS IN THERMAL POWER PLANTS AND WATER WORKS.

**SECTION - B :**

**1. VALVE SIZES**

STANDARD	RATING / CLASS	SIZES *
BS : 5155	PN10 & PN16	200, 250, 300, 350, 400, 450
		500, 600, 700, 800, 900 & 1000
	PN2.5 & PN6	1200, 1400 & 1600
AWWA C-504	CLASS 150	600, 700, 800, 900 & 1050
	CLASS 75 & CLASS 25	1200, 1350 & 1500

\* ADDITIONAL SIZES IN FABRICATED CONSTRUCTION ( MS:IS 2062) ARE:

PN10 RATING : SIZES 1200 TO 1600

PN6 RATING : SIZES 800 TO 1000

PN2.5 RATING : SIZE 1000

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APPROVED BY :

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**2. TYPES OF END CONNECTION :**

**FLANGES DRILLED TO SUIT FOLLOWING FLANGES (FF OR RF)**

DESIGN	VALVE SIZES	FLANGES TO SUIT
BS : 5155	200 TO 1000	BS : 4504 - PN10 & PN16
		IS : 6392 TABLE - 11 & TABLE - 16
	1200 TO 1600	BS : 4504 PN6 & PN2.5
AWWA C-504	600 TO 1500	AWWA C-207
		ANSI B16.1 CLASS - 125
		BS : 3239 CLASS - 150
		MSS : SP 44 CLASS - 150

**3. VALVE OPERATIONS:**

- a) HANDLEVER - FOR SIZES 200, 250, 300 (PN10) & FOR SIZES 200 & 250 (PN16)
- b) WORM GEAR WITH HANDWHEEL ( BDK'S STANDARD ACTUATOR UNLESS OTHER WISE SPECIFIED )
- c) WORM GEAR WITH CHAINWHEEL
- d) ELECTRICAL ACTUATORS
- e) PNEUMATIC ACTUATORS

**5. BODY & DISC MATERIALS:**

MATERIALS

SPECIFICATIONS

CI

IS : 210 Gr.FG260 / ASTM A216 CLASS A

DI

ASTM A536 Gr. 60-40-18

WCB

ASTM A216 Gr. WCB

CF8

ASTM A 351 Gr. CF8

CF8M

ASTM A351 Gr. CF8M

M.S

M.S IS : 2062 Gr.B

**5. STEM MATERIALS:**

MATERIALS

SPECIFICATIONS

410

ASTM A276 TYPE 410

304

ASTM A276 TYPE 304

316

ASTM A276 TYPE 316

**6. SEAL - RING MATERIALS:**

**NITRILE, NEOPRENE, EPDM, VITON & S SILICON**

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**7. 'O' RING MATERIALS :**

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

**8. FASTENERS :**

- a) EXTERNAL : IS : 1367 Gr.8.8 / Gr.8
- b) INTERNAL : ASTM A276 TYPE 304 / 316
- c) EXTERNAL : ASTM A193 Gr. B7 / ASTM A194 Gr.2H

a & b - BDK's STANDARD

**9. 'OPTIONAL FEATURES:**

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

**NOTES:**

- a) FOR OTHER COMPONENTS & MATERIAL, REFER RESPECTIVE SALES DRAWINGS OR CUSTOMERS REQUIREMENT.
- b) WHEREVER MATERIAL OPTIONS ARE GIVEN IN SALES DRAWINGS, SALES CO-ORDN DEPARTMENT SHALL INDICATE THROUGH SALES DRAWINGS TO PPC DEPARTMENT.

FOR ANY OTHER CLARIFICATIONS AND SPECIAL REQUIREMENT, CONSULT DESIGN & DEVELOPMENT DEPARTMENT.

PREPARED BY :

APPROVED BY :