

BUTTERFLY VALVE, MODEL-12 & 12L
TECHNICAL SPECIFICATION

REF.NO.	BFTS0003	04	REV.NO.
DATE	02 FEB 1999		
SHEET	01	OF	03



SECTION - A

1. PRODUCT : BUTTERFLY VALVE, MODEL-12/12L
2. ENDS : WAFER (MODEL - 12)
LUGGED (MODEL - 12L)
3. PRESSURE RATING : PN16 FOR SIZES 50 TO 150. PN10 FOR SIZES 200 TO 300.
4. VACUUM : UPTO 2 TORR
5. STANDARDS
a) DESIGN : BS: 5155
b) FACE-TO-FACE DIMENSIONS : BS: 5155-WAFER SHORT
ISO : 5752
API : 609 LOW PRESSURE
c) TESTING : BS 6755 (PART-1)
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 : 50, 65, 80, 100, 125, 150, 200, 250, & 300.

2. TYPES OF END CONNECTIONS:

- a) WAFER (MODEL - 12)
b) LUGGED (MODEL - 12L)

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

BS: 4504 PN10 & PN16

IS : 6392 TABLE-11 & TABLE-17

BS : 10 TABLE - 'D' & 'E'

ONLY SIZES 50, 65, 80, & 100 ARE SUITABLE TO MOUNT BETWEEN BS : 4504

PN-6 FLANGES

4. VALVE OPERATIONS:

- a) HAND LEAVER (BDK'S STANDARD UNLESS OTHERWISE SPECIFIED.)
b) WORM GEAR - WITH HANDWHEEL
c) WORM GEAR - WITH CHAIN WHEEL
d) ELECTRICAL ACTUATOR
e) PNEUMATIC ACTUATOR

PREPARED BY :

APPROVED BY :

BUTTERFLY VALVE, MODEL-12 & 12L
 TECHNICAL SPECIFICATION

REF.NO.

BFTS0003

04
 REV.NO.

DATE

02 FEB 1999

SHEET

02

OF

03



5. BODY MATERIAL:

MATERIALS

SPECIFICATION

CI	IS : 210 Gr. FG220
DI	ASTM A536 Gr. 60-40-18
SGI	IS : 1865 Gr. 500/7
WCB	ASTM A 216 Gr. WCB
CF8	ASTM A 351 Gr. CF8
CF8M	ASTM A 351 Gr. CF8M

ALL CI, DI, SGI & WCB BODIES ARE DULY P.U COATED/STOVINGENAMEL COATED/POWDER COATED.

6. DISC MATERIAL:

MATERIALS

SPECIFICATION

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, DI, SGI & WCB DISC INSERTS ARE USED.

ALL DI & SGI UNLINED DISCS ARE DULY P.U. COATED / STOVING ENAMEL COATED / POWDER COATED.

7. ELASTOMER / SEAT & LINING MATERIALS:

SEAT	LINING-MATERIALS
NATURAL	EBONITE
NEOPRENE	NEOPRENE
NITRILE	NITRILE
EPDM	EPDM
HYPALON	HYPALON
BUTYL	BUTYL
VITON	VITON
SILICON	

8. STEM MATERIALS:

MATERIALS

SPECIFICATION

410	ASTM A276 TYPE 410
304	ASTM A276 TYPE 304
316	ASTM A276 TYPE 316

PREPARED BY :

APPROVED BY :

BUTTERFLY VALVE, MODEL-12 & 12L
TECHNICAL SPECIFICATION

REF.NO.	BFTS0003	04	REV.NO.
DATE	02 FEB 1999		
SHEET	03	OF	03



9. O-RING MATERIALS:

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

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 :