

**DIAPHRAGM VALVE - SERIES 'S2K'
TECHNICAL SPECIFICATIONS**

REF.NO.

DVTS0001

06
REV.NO.

DATE

03 FEB 1999

SHEET

01

OF

03



SECTION - A :

1. **PRODUCT** : DIAPHRAGM VALVES, SERIES 'S2K' WEIR TYPE
2. **PRESSURE RATING** : PN16 - DN 06 TO 50
(FOR ELASTOMER DIAPHRAGM) PN10 - DN 65 TO 150
PN6 - DN 200 TO 350
3. **STANDARDS :**
 - DESIGN** : BS: 5156
 - FACE O FACE DIMENSION:**
 - A. FLANGED END : BS: 5156 FOR SIZES - 15 TO 300, SIZE 350 BDK STANDARD.
 - B. BUTT WELD END
 - C. SOCKET WELD END } : BDK STANDARD
 - D. SCREWED END
 - TESTING** : BS: 6755 PART - I
4. **FLOW DIRECTIONS** : BI-DIRECTIONAL
5. **APPLICATIONS** : FOR HANDLING OF LIQUID, VAPOR, GAS & FLUID IN WATER, CHEMICAL AND OTHER PROCESS INDUSTRIES FOR BOTH ON - OFF AND THROTTLING APPLICATIONS.

SECTION - B :

1. **VALVES SIZES :** : 06, 10, 15, 20, 25, 32, 40, 50, 65, 80, 100, 125, 150, 200, 250, 300 & 350mm
2. **TYPE OF END CONNECTION :**
 - A. FLANGED END
 - B. BUTT WELD END
 - C. SOCKET WELD END
 - D. SCREWED END

3. DRILLING VARIATIONS :

DRILLING

CLASS 150 / 125
TABLE D, E & F
PN6, PN10 & PN16

REFERENCE STANDARD

ASME / ANSI, B16.5 / 16.1
BS: 10
BS: 4504, ISO:7005 & IS:6392

4. BUTTWELD END (SIZE RANGE DN 06 TO 100) :

PIPE SCHEDULE

10, 10S, 40, 40S, 80, 80S,

REFERENCE STANDARD

ASME B16.25

5. SOCKET WELD END VARIATIONS (SIZE RANGE DN 06 TO 100) :

PIPE SCHEDULE

10, 10S, 40, 40S, 80, 80S,

REFERENCE STANDARD

ASME B16.11

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APPROVED BY :

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6. SCREWED END (SIZE RANGE - DN 06 TO 100) :

<u>TYPE</u>	<u>REFERENCE STANDARD</u>
BSP (RP)	BS : 21
BSPT (RC)	BS : 21
NPT	ANSI / ASME B1.20.1
IDF	IS : 3382

7. VALVE OPERATION :

- A. HAND WHEEL
- B. CHAIN WHEEL
- C. PNEUMATIC ACTUATOR
- D. ELECTRICAL ACTUATOR

8. BODY / BONNET / COMPRESSOR MATERIALS :

<u>MATERIAL</u>	<u>SPECIFICATION</u>
CI	IS 210 GR. 200 / FG 260 [FG 260 - BDK STD]
WCB	ASTM A 216 GR. WCB
CF8	ASTM A351 GR. CF8
CF8M	ASTM A351 GR. CF8M
CF3M	ASTM A351 GR. CF3M
CF3	ASTM A351 GR. CF3
DI	ASTM A395 / ASTM A536 GR. 60-40-18
SGI	IS 1865 GR. 500 / 7

9. i) TYPES OF DIAPHRAGM :

- A) CLOSE TYPE - STANDARD
- B) OPEN TYPE - OPTIONAL

ii) DIAPHRAGM MATERIAL :

NATURAL, WHITE NATURAL, NEOPRENE, BUTYL, WHITE BUTYL, NITRILE (BUNA - N), HYPALON, ETHELENE, PROPYLENE (EPDM), WHITE EPDM, VITON, SILICON, TEFLON,

10. BODY LINING MATERIAL :

NATURAL, NATURAL (A.A), NATURAL (A.S), WHITE NATURAL, NEOPRENE, NEOPRENE - CMS, BUTYL, BUTYL - CMS, WHITE BUTYL, EBONITE, EPDM, WHITE EPDM, FRP (INTERNAL & EXTERNAL) SHRL - CMS, HYPALON, LEAD, NITRILE, VITON, PP, GLASS, PVC, TEFLON, TEFLON,

11. STEM MATERIAL :

<u>MATERIAL</u>	<u>SPECIFICATION</u>
410	ASTM A276 TYPE 410
304	ASTM A276 TYPE 304
316	ASTM A276 TYPE 316

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12. STEM BUSH MATERIAL :

<u>MATERIAL</u>	<u>SPECIFICATION</u>
SGI (STANDARD)	IS:1865 Gr. 500/7
ALUMINIUM BRONZE (OPTIONL)	BS: 2874 Gr. CA-104
LEADED BRASS (OPTIONAL)	BS: 2874 Gr. CZ-122

13. FASTENERS - BODY TO BONNET :

- A. STUD IS:1862 - P 4.6 / NUT IS:1363 (Pt3) - 4
 - B. ASTM A276 TYPE 304
 - C. ASTM A276 TYPE 316
 - D. ASTM 193 GR. B7 / ASTM A194 GR. 2H
 - E. ASTM 193 GR. B8 / ASTM A194 GR. 8
- 'A' IS STANDARD & OTHERS ARE OPTIONAL

14. OPTIONAL FEATURES :

- INDICATING STEM WITH TRAVEL STOP
- PADLOCK ARRANGEMENT
- EXTENDED STEM
- T-KEY & ADOPTER
- SEALED BONNET
- LIMIT SWITCHES
- BODY WITH SMOOTH SURFACE FINISHES
- DIN:3202 FACE TO FACE BODY
- ISO: 4200 BODY
- RADIOGRAOHY OF SHELL MATERIAL

NOTES :-

- 01. FOR OTHER COMPONENTS & ITS MATERIALS, REFER RESPECTIVE SALES DRG. / CUSTOMER'S REQUIREMENT.
- 02. WHEREVER MATERIAL OPTIONS ARE GIVEN IN SALES DRG, S. C. DEPARTMENT SHALL INDICATE THROUGH SALES DRG. TO PPC

FOR ANY OTHER CLARITICATION & SPL. REQUIREMENTS CONSULT DESIGN & DEVELOPMENT DEPT.

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APPROVED BY :