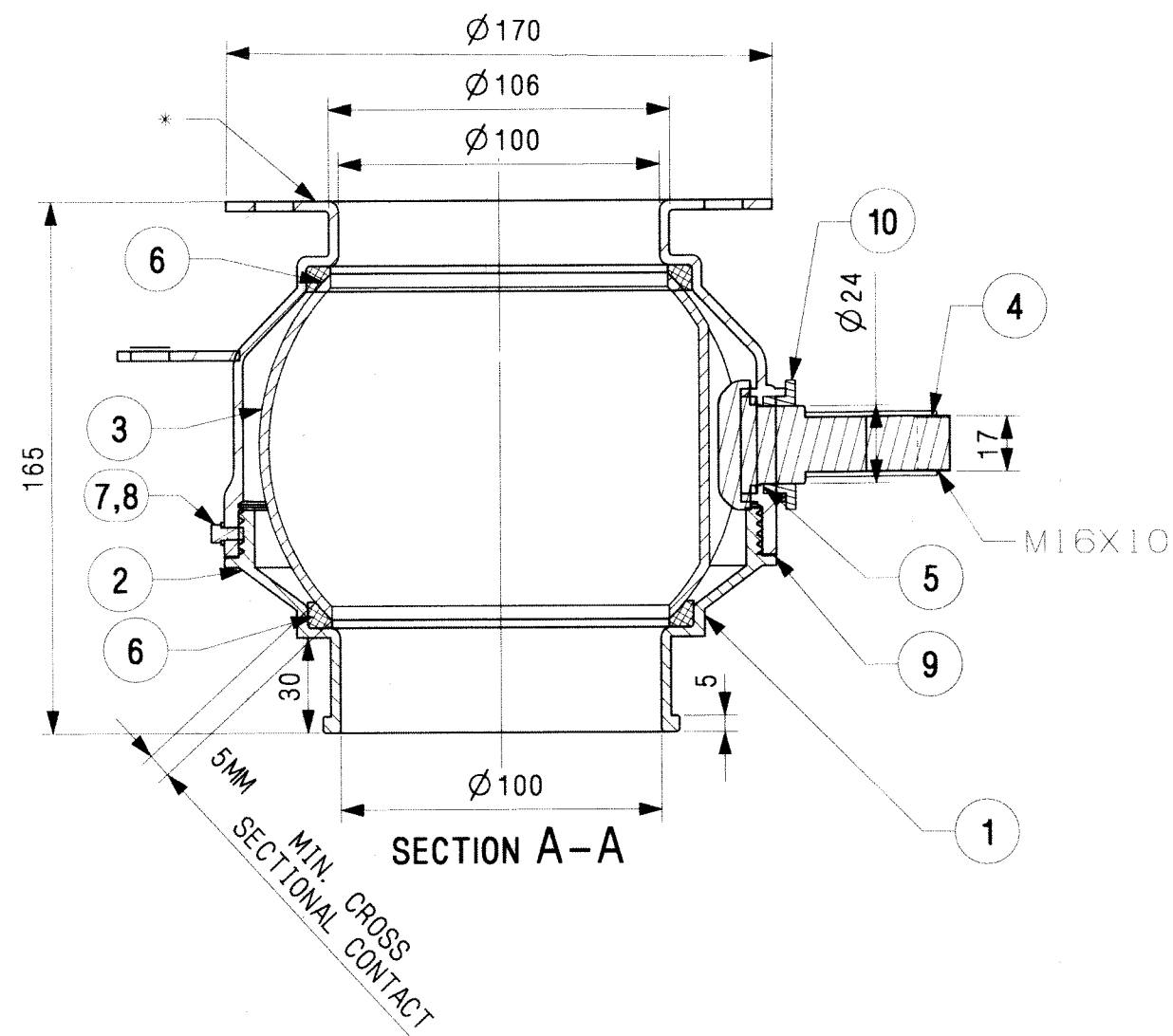
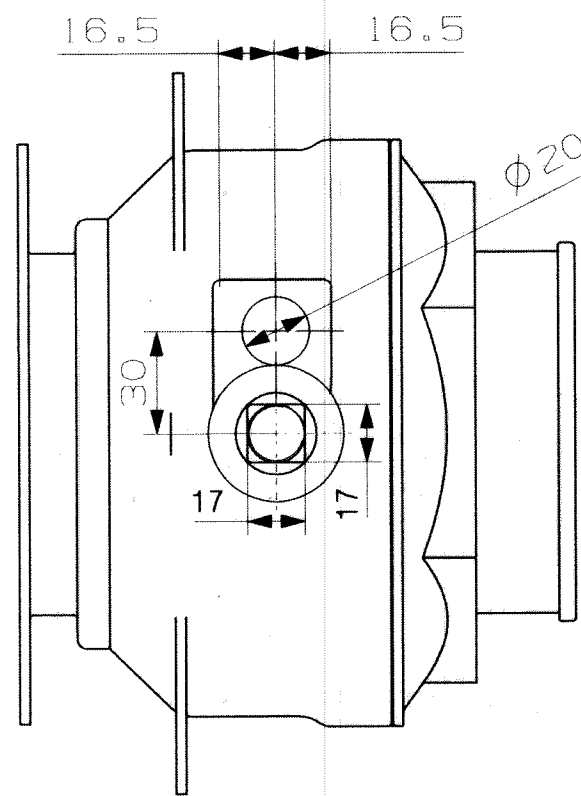
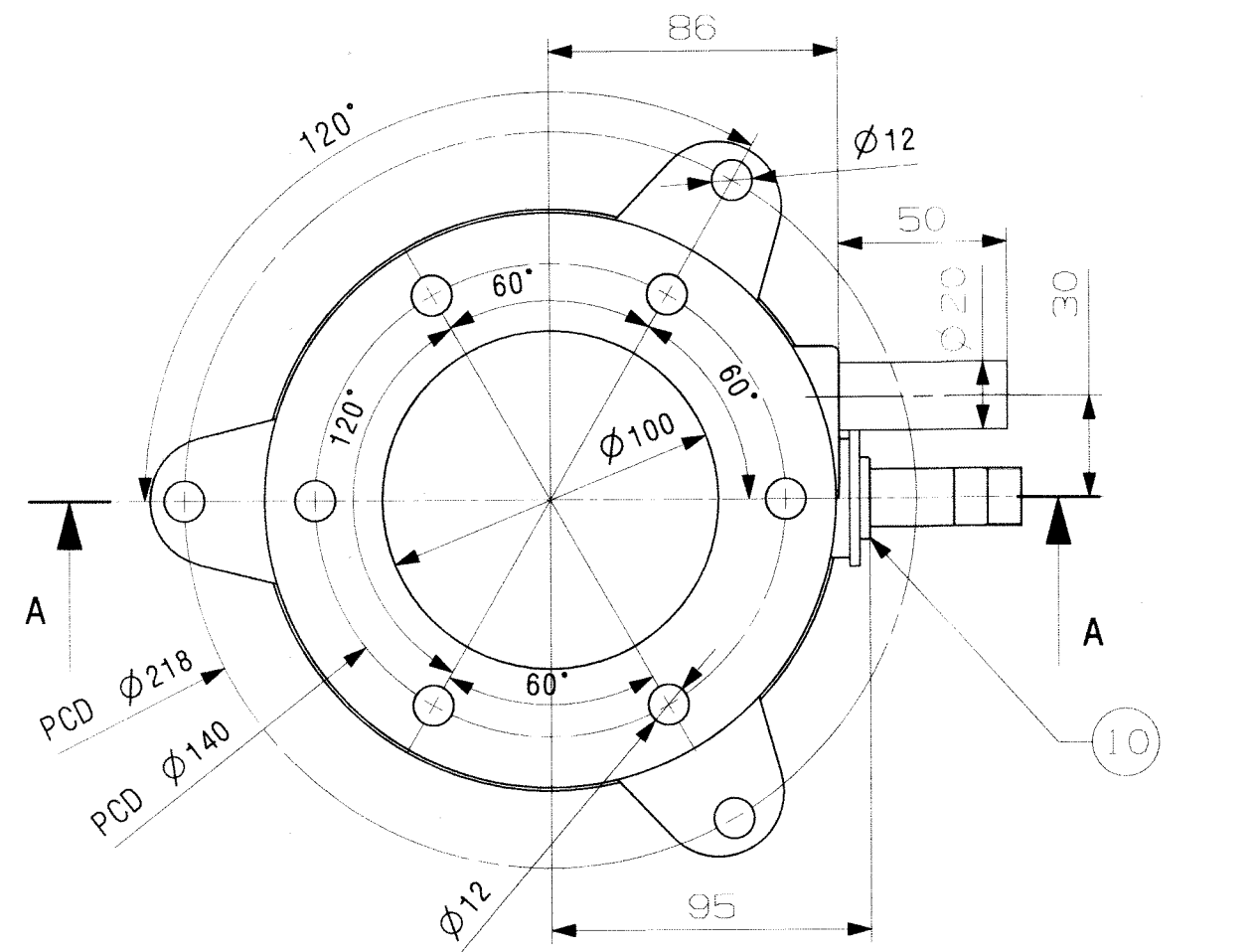


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**NOTE:-**

1. GENERAL INTERFACE DESIGN OF 4" BALL VALVE FOR DRAIN.
2. OPENING DEVICE SHOULD BE PLACED SUCH A WAY THAT IT SHOULD MOVE MAXIMUM 90° TO OPEN OR CLOSE THE BALL VALVE COMPLETELY.
3. HANDLE SHOULD BE PLACED SUCH A WAY THAT FOR OPENING OF VALVE, IT SHOULD MOVE MAXIMUM 45° EITHER SIDE. SUITABLE STOPPING ARRANGEMENT IS ALSO BE PROVIDED TO CONTROL OVERSHOOT OF OPENING AND CLOSING OF BALL.
4. SURFACE MARKED BY (\*) SHOULD BE MACHINE FINISHED.
5. LENGTH OF HANDLE IS INDICATIVE ONLY ACTUAL LENGTH OF HANDLE MAY BE CONFIRMED TO SUIT AT SITE.
6. MATERIAL OF SEALING RINGS FOR BALL SHALL BE VIRGIN PTFE HAVING MINIMUM CONTACT OF 5 MM AS SHOWN IN SECTIONAL VIEW. OTHER SEALING RINGS ARE ALSO MADE OF VIRGIN PTFE.
7. THE WALL THICKNESS SHALL BE KEPT MINIMUM 3MM AND WEIGHT OF BODY SHALL ALSO BE KEPT AS MINIMUM AS POSSIBLE.
8. CLEARANCE FOR FITMENT BETWEEN STEM AND BALL VALVE AND CLEARANCE FOR FITMENT OF STEM WITH BODY SHALL BE DONE IN ACCORDENCE TO SPECIFICATION NO. IS/ISO 17292.2004.
9. CYCLIC TEST FOR OPENING AND CLOSING OF BALL VALVE SHALL DONE WITH 25,000 CYCLES.
10. HYDROSTATIC PRESSURE TEST SHALL BE DONE WITH 5 KG WATER PRESSUR AS PER PROCEDURE DEFINED IN ISO 5208, FOLLOWED BY CYCLIC TEST.
11. FOR TESTING OF CYCLIC AND HYDROSTATIC TESTING SELECTION OF SAMPLES SHALL BE DONE AS PER IS:1711.
12. STEM SHALL BE MACHINED FOR 17MM SQ. INTERFACE AND STEM END SHALL BE THREADED TO M16 X 10MM.
13. # USABLE SURFACE OF BALL SHALL BE FREE FROM DEFECTS LIKE DENT ON SURFACE, POROSITY OR ANY OTHER DEFECTS AND SHALL BE OF R5 FINISH.

|    |   |   |  |  |                             |   |
|----|---|---|--|--|-----------------------------|---|
| 10 | GLAND NUT   | 1 |  |  | ASTM A351<br>CF8M/AIS1316   |   |
| 9  | PACKING RING  | 1 |  |  | PTFE TO<br>ASTM D3294       |   |
| 8  | S.S. HEX HEAD SCREW M4x7<br>(A2-70 to IS:1367 Pt.14-84) | 1 |  |  | IS: 1364<br>(PART. 2) -2002 |   |
| 7  | SPRING WASHER B4  | 1 |  |  | IS: 3063-94                 |   |
| 6  | SEALING RING  | 2 |  |  | PTFE TO ASTM<br>D3294       | @ |
| 5  | STEM SEAT   | 1 |  |  | PTFE TO ASTM<br>D3294       |   |
| 4  | STEM  | 1 |  |  | ASTM A351<br>CF8M/AIS1316   |   |
| 3  | BALL  | 1 |  |  | ASTM A351<br>CF8M/AIS1316   | # |
| 2  | BALL VALVE THREADED END                                 | 1 |  |  | ASTM A351<br>CF8M/AIS1316   |   |
| 1  | BALL VALVE BASE   | 1 |  |  | ASTM A351<br>CF8M/AIS1316   |   |

| ITEM            | DESCRIPTION & DIMENSIONS | No. OFF | REF. DRG.    | WT. OF ONE kg             | MTL. & SPEC. | REMARKS |
|-----------------|--------------------------|---------|--------------|---------------------------|--------------|---------|
| SUPERSEDED BY:- |                          |         |              |                           |              |         |
| ASSEMBLY DRGS.  |                          |         | SUPERSEDES:- |                           |              |         |
| REFERENCE :-    |                          | SCALE   | P            | INDIAN RAILWAYS           |              |         |
| CG-11089        |                          | 1:2     | C            | ICF/RCF TYPE COACHES      |              |         |
|                 |                          |         | D            | BALL VALVE 4"             |              |         |
|                 |                          |         | J.S.         | TWO PIECE THREADED DESIGN |              |         |
|                 |                          |         | SS/75/14     |                           |              |         |
| CDIC NO. :-     |                          | B.G.    | R.D.S.O.     | CG-14097                  |              |         |
| K503            |                          | [CG]    |              |                           |              |         |

| 2         | SS/56/16 | 1. Stop pin and its related dimensions are added in ball valve body.<br>2. mounting hole dimension 12mm was 10 mm for PCD 140 and 218.<br>3. Dimension 95mm for stem added. |      |      |
|-----------|----------|---|------|------|
| 1         | SS/24/16 | 1. NOTE-3 & 6 MODIFIED, NOTE-5 DELETED AND ITEM-10 ADDED.<br>2. INTERFACE OF BALL-VALVE WITH THE MECHANISM MODIFIED.  |      |      |
| ALT. ITEM | AUTHY.   | DESCRIPTION   | CKD. | DATE |