

KARANDIKAR & ASSOCIATES

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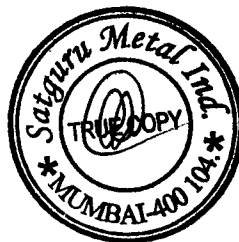
TEST LABORATORY ADDRESS :

H.NO 850, MAIN ROAD,
NEAR JAIN TEMPLE,
DAHANU, DIST : THANA,
PIN : 401 601.

TEST REPORT NO. : K&A/DHN/96/105
DATE : February 21, 1996.

TEST REPORT ON : Duplex T/C Head.

TEST REPORT FOR : Satguru Metal Industries.
101, Planet Industrial Estate,
Subhsh Road, Vile Parle (E),
Bombay 400 057.



NOTE : 1) This refers only to the particular item(s) submitted
for testing.
2) If necessary this report shall be reproduced in full.



: 2 :

Item : Duplex T/C HeadReport No. : K&A/DHN/96/105
-----Date : Page of
21.02.1996. 2 4
-----1. Requested by : Mr. Suresh.
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Request ref : Challan No 5909 dated 1.02.1996.

2. Item : Duplex T/C Head.  
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Drg ref : # TC/M/D/02.

3. Manufacturer : Satguru Metal Industries;
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101, Planet Industrial Estate,  
Subhsh Road, Vile Parle (E),  
Bombay 400 057.4. Reference Specifications : IS 2147/1962 - IP 65.  
~~~~~5. Initial Examination :  
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5.1) The Duplex T/C Head - Enclosure was inspected after removing the packing and was found to be in good condition.

5.2) It was inspected for overall dimensions as per the drawing and was observed to be in agreement.

5.3) IR was measured between a terminal on the block and the body at 500 VDC and was noted.

6. Test Procedure :  
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6.1) The Duplex T/C Head (Enclosure) was hung in the dust chamber.

6.2) The enclosure was connected through the tubing to the vacuum pump.

6.3) The vacuum pump was started and the negative of -200 mm water column was attained and maintained.

6.4) The quantity of air sucked was measured.

6.5) It was further subjected to the dust laden environment as per the requirements of IS 2147/1962 - IP 6X.

6.6) Since the amount of air drawn at -200 mm of WC was not more than 80 times the volume of the enclosure the exposure to the dust laden environment was continued for a period of 8 Hr. The test was stopped there after.

6.7) The recovery period of 1/2 Hr. was allowed.

6.8) The enclosure was cleaned from outside and was opened.

- 6.9) It was inspected for ingress of dust and the observations were noted.
- 6.10) The enclosure was closed and was subjected to the water jet as per the requirements of IS - 2147/1962 - IP - X5.
- 6.11) The water jet was maintained for a period of 5 min. from each axis so that the total time of exposure was 15 min.
- 6.12) At the conclusion of the test and a recovery period of 1 min, the enclosure was dried from outside and thereafter opened and checked for the water ingress inside the enclosure.
- 6.13) The IR between a terminal on the terminal block and the body was measured.

6. Observations :
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- 6.1) After exposure to the dust, it was observed that there was no ingress of dust inside the enclosure.
- 6.2) After exposure to the water jet test, it was observed that there a small quantity of water inside the enclosure. It was measured and was found to be 2 cc.
- 6.3) The IR value was unaffected.

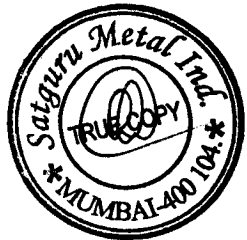
7. Conclusion :  
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- 7.1) The quantity of water entered was not found to affect adversely the working of the Duplex T/C Head. Also the quantity of water entered was very small compared to the volume of the enclosure.
- 7.2) The Duplex T/C Head - Enclosure which is as per drg no. # TC/M/D/02 meets the requirements of IS 2147 - 1962 / IP 65.

For Karandikar & Associates

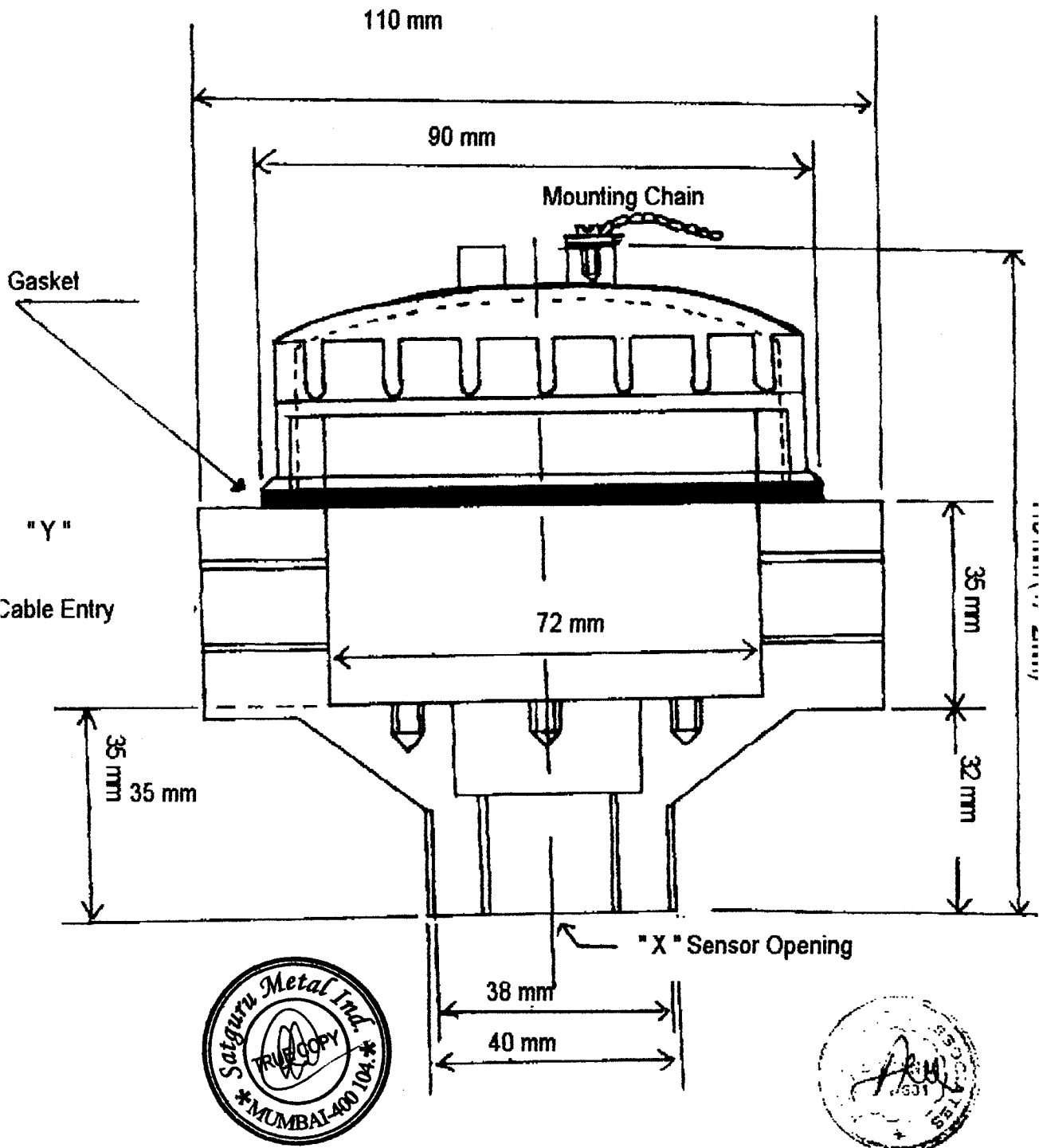
A.V. Karandikar


(A.V. Karandikar.)
 Laboratory Incharge.



1/2 BSP / NPT, 3/4 BSP/NPT, 1" BSP/NPT (OR) Equivalent

3/4" ET, M20, PG Threads, 1/2 BSP/NPT, 3/4 BSP/NPT (OR) Equivalent



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|---|---|-------|--------|--------|-------------|
|  | Satguru Metal Industries, MUMBAI | | | | |
| | Title: Weather Proof IP:65 Duplex Bulk Head | | | | |
| Drn By | Chd By | Scale | Date | Rev Dt | Drawing No: |
| S.K | S.K | 1:1 | 1/2/96 | | TC/M/D/O2 |