



**भारत सरकार**  
**GOVERNMENT OF INDIA**  
**उपभोक्ता मामले, खाद्य एवम् सार्वजनिक वितरण मंत्रालय**  
**Ministry of Consumer Affairs, Food & Public Distribution**  
**उपभोक्ता मामले विभाग**  
**Department of Consumer Affairs**  
**राष्ट्रीय परीक्षण शाला (उ०क्षे०)**  
**NATIONAL TEST HOUSE (NR)**

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**TEST CERTIFICATE**

Sample No. ME/01868

Issued to:

Aman Engineering Works  
C-54 & 55, Focal Point Extension,  
Jalandhar -144004

Date: 08.6.2009

File No. NTH/NR/ME/2008/88-E

Ref. No. Nil

Dated: 06-11-2008 and further correspondence

Dated 10-11-2008, 03-12-08 & 05-03-09

Sample Recd on 01-12-2008

One sample consisting of three water meters described as "50 mm Multi Jet class B of KRANTI MAKE having meter numbers 265536, 257537 & and 257838.

As desired, the above meters were subjected to Type Test as per IS: 779-1994 read with IS: 6784-1996, . The results obtained are noted below:-;

Tests Results		Observed value			Specified value
		Meter Number			
		265536	257537	257838	
<b>A</b>	<b>Performance</b>				
1	Minimum starting flow at which measurement starts	Satisfactory	Satisfactory	Satisfactory	Shall start registering at a flow rate of 300 l/h
2	Pressure tightness test				
2.1	At 1.6 MPa for 15 minutes	Satisfactory	Satisfactory	Satisfactory	No leakage, seepage or deformation
2.2	At 2.0 MPa for 1 minutes	Satisfactory	Satisfactory	Satisfactory	No leakage, seepage or deformation
3	Loss of pressure in MPa				
3.1	For nominal flow rate (Qn: 15 K l/h)	0.015	0.015	0.015	0.025 Max
3.2	For maximum flow rate (Qmax: 30 K l/h)	0.075	0.075	0.075	0.100 Max
4	Metering Accuracy				
4.1	Error in metering accuracy at maximum flow rate (Qmax : 30 KI/h)	-1.0 %	0.0 %	+ 0.5%	+/- 2% Max





NTH/NR/ME/2008-88-E

Tests Results	Observed value	Specified value		
	Meter Number			
	265226	257537		
	257838			
4.2 Error in metering accuracy at normal flow rate (Qn: 15 K l/h)	-0.7%	0.0%	+0.3%	+/- 2% Max
4.3 Error in metering accuracy at transitional flow rate (Qt: 1200 l/h)	+1.0%	+0.5%	+1.5%	+/-2% Max
4.4 Error in metering accuracy at minimum flow rate (Q min : 300 l/h)	-2.5%	+2.5%	0.0%	+/-5% Max
5. Performance after Life test (Accelerated endurance test as per clause 12.4.4) conducted on two meters bearing no 257537, 257838				
	Meter No			
	257537	257838		
5.1 Minimum starting flow at Satisfactory	Satisfactory	Satisfactory	Shall start registering at a flow rate of 300 l/h	
5.2 Pressure tightness test				
5.2.1 At 1.6 MPa for 15 minutes	Satisfactory	Satisfactory	No leakage seepage or deformation	
5.2.2 At 2.0 MPa for 1 minute	Satisfactory	Satisfactory	No leakage seepage or deformation	
5.3 Loss of pressure in MPa				
5.3.1 For nominal flow rate (Qn: 15 K l/h)	0.020	0.020	0.025 Max	
5.3.2 For maximum flow rate (Qmax: 30 K l/h)	0.080	0.080	0.100 Max	
5.4 Metering accuracy				
5.4.1 Error in metering Accuracy at maximum Flow rate (Qmax : 30 K l/h)	-1.0%	-1.0%	+/-2% Max	





NTH/NR/ME/2008/88-E

Meter No

Meter No	257537	257838	257537
5.4.2 Error in metering Accuracy at normal Flow rate (Qn : 15 K l/h)	-1.3%	-1.0%	+/-2% Max
5.4.3 Error in metering Accuracy at transitional flow rate (Qt : 1200 l/h)	+1.5%	+1.0%	+/-2% Max
5.4.4 Error in metering Accuracy at minimum Flow rate (Q min.: 300l/h)	+2.5%	+2.5%	+/-5% Max

6- Performance after Temperature suitability test (As per clause 10.3)  
Two meters, one after initial performance test and other after life test were subjected to temperature suitability test

Meter No

Meter No	257536	257537	257537
6.1 Minimum starting flow at which measurements starts	Satisfactory	Satisfactory	Shall start registering at a Flow rate of 300 l/h
6.2 Pressure tightness test			
6.2.1 At 1.6 MPa for 15 minutes	Satisfactory	Satisfactory	No leakage seepage or deformation
6.2.2 At 2.0 MPa for 15 minutes	Satisfactory	Satisfactory	No leakage seepage or deformation
6.3 Loss of pressure in MPa			
6.3.1 For nominal flow rate (Qn 15 K l/h)	0.020	0.020	0.025 Max
6.3.2 For maximum flow rate (Qmax 30 K l/h)	0.080	0.080	0.100 Max
6.4 Metering Accuracy			
6.4.1 Error in metering accuracy at maximum flow rate (Qmax : 30 K l/h)	0.0%	-1.0%	+/-2% Max
6.4.2 Error in metering Accuracy at normal Flow rate (Qn : 15 K l/h)	-0.5%	+1.3%	+/-2% Max
6.4.3 Error in metering Accuracy at transitional flow rate (Qt : 1200 l/h)	-1.0%	+1.5%	+/-2% Max
6.4.4 Error in metering Accuracy at minimum Flow rate (Q min.: 300 l/h)	+4.0%	+2.5%	+/-5% Max

*[Handwritten Signature]*





NTH/NR/ME/2008/88-E

7	Meters size, threads, and dimensions (in mm) (Notations as per Table 2 of IS: 779-1994)		
7.1	Meter size	50	50
7.2	Threads	Satisfactory	G2 1/2 B
7.3	Length of threads, on one side other side	25 25	15 Min 15 Min
7.4	Length of meter with nipples	469	470 +/- 5
7.5	Length of meter without Nipples	329	330 +/- 0
7.6	Width (W)	129.5	270 Max
7.7	Height (H1)	47	115 Max
7.8	Height (H2)	97	300 Max
8	Value of verification Scale interval (I)	1.0	2.0 Max

Note:- The samples were tested at factory site on 1.12.2008, 16.03.2009 and 17.03.2009

Remarks:- The sample meets the requirements of IS: 779-1994 in respect of test carried out for water meter ( Domestic type), of size 50 mm, Multi jet and class "B"

Tested By

Checked By

Approved By

*Anil Chopra*

*R.N. Ram*

*Sher Singh*

(ANIL CHOPRA)  
SCIENTIST SB(Mech)

(R.N. RAM)  
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SCIENTIST SD