



भारत सरकार
GOVERNMENT OF INDIA
उपभोक्ता मामले, खाद्य एवं 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: 08.06.2009

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

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 "40 mm Multi Jet class B of
KRANTI MAKE having meter numbers 265330, 265331 & and 265332

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			
		265330	265331	265332	
A	Performance				
1	Minimum starting flow at which measurement starts	Satisfactory	Satisfactory	Satisfactory	Shall start registering at a flow rate of 200 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: 10 Kl)	0.020	0.020	0.020	0.025 Max
3.2	For maximum flow rate (Qmax: 20 Kl)	0.085	0.085	0.085	0.100 Max
4	Metering Accuracy				
4.1	Error in metering accuracy at maximum flow rate (Qmax : 20 Kl)	0.0 %	0.0%	0.0%	+/- 2% Max

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Tests Rerults		Observed value	Specified value
		Meter Number	
4.2	Error in metering accuracy at normal flow rate (Qn: 10 Kl)	0.0%	+1.3%
4.3	Error in metering accuracy at transitional flow rate (Qt: 800 l/h)	+2.0%	+1.5%
4.4	Error in metering accuracy at minimum flow rate (Q min 200 l/h)	0.0%	-1.5%
5	Performance after Life test (Accelerated endurance test as per clause 12.4.4) conducted on two meters bearing no. 265331 and 265332		
		Meter No	
5.1	Minimum starting flow at which measurements starts	265331 Satisfactory	265332 Satisfactory
5.2	Pressure tightness test		Shall start registering at a flows rate of 200 l/h
5.2.1	At 1.6 MPa for 15 minutes	Satisfactory	Satisfactory
5.2.2	At 2.0 MPa for 1 minute	Satisfactory	Satisfactory
5.3	Loss of pressure in MPa		No leakage seepage or deformation
5.3.1	For nominal flow rate (Qn: 10 K l/h)	0.020	0.020
5.3.2	For maximum flow rate (Qmax: 20 K l/h)	0.085	0.085
5.4	Metering accuracy		No leakage seepage or deformation
5.4.1	Error in metering Accuracy at maximum Flow rate (Qmax :20K l/h)	-1.0%	0.0%



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Meter No

265330

265332

5.4.2 Error in metering Accuracy at normal Flow rate (Q_n: 10 K l/h)

-1.0%

+1.0%

+/-2% Max

5.4.3 Error in metering Accuracy at transitional flow rate (Q_t: 800 l/h)

+1.5%

+1.0%

+/-2% Max

5.4.4 Error in metering Accuracy at minimum Flow rate (Q min.: 200 l/h)

+2.5%

+4.0%

+/-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

265330

265332

6.1 Minimum starting flow at which measurements starts

Satisfactory

Satisfactory

Shall start registering at a Flow rate of 70 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 (Q_n: 10 K l/h)

0.020

0.020

0.025 Max

6.3.2 For maximum flow rate (Q_{max}: 20 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 (Q_{max}: 20 K l/h)

0.0%

0.0%

+/-2% Max

6.4.2 Error in metering Accuracy at normal Flow rate (Q_n: 10 K l/h)

1.0%

1.0%

+/-2% Max

6.4.3 Error in metering Accuracy at transitional flow rate (Q_t: 800 l/h)

1.0%

+1.0%

+/-2% Max

6.4.4 Error in metering Accuracy at minimum Flow rate (Q min.: 200 l/h)

+2.5%

+4.0%

+/-5% Max



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Meters size, threads, and dimensions (in mm) (Notations as per Table 2 of IS: 779-1994)		
7.1	Meter size	40
7.2	Threads	Satisfactory
7.3	Length of threads, on one side	23
	other side	24
7.4	Length of meter with nipples	428
7.5	Length of meter without Nipples	298.5
7.6	Width (W)	132
7.7	Height (H1)	47
7.8	Height (H2)	95
8	Value of verification Scale interval (I)	1.0

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 40 mm, Multi jet and class "B"

Tested By

Checked By

Approved By

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SCIENTIST SB(Mech)

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