



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

205293

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-C
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 "25 mm Multi Jet class B of KRANTI MAKE having meter numbers 265226, 265295 & and 265293
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			
		265226	265295	265293	
A	Performance				
1	Minimum starting flow at which measurement starts	Satisfactory	Satisfactory	Satisfactory	Shall start registering at a flow rate of 70 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: 3500l/h)	0.015	0.015	0.015	0.025 Max
3.2	For maximum flow rate (Qmax: 7000 l/h)	0.070	0.070	0.070	0.100 Max
4	Metering Accuracy				
4.1	Error in metering accuracy at maximum flow rate (Qmax : 7000l/h)	+ 0.3 %	- 1.2%	+ 0.4%	+/- 2% Max

[Signature]

Note : 1. This test certificate or reports may not be published for commercial purpose, except in full unless permission for the same has been obtained from the DIRECTOR, NATIONAL TEST HOUSE



NTH/NR/ME/2008/88-C

Tests Rersults	Observed value	Specified value
	Meter Number	
	265226	265295
	265226	265295
4.2 Error in metering accuracy at normal flow rate (Qn: 3500l/h)	+1.0%	-1.0%
4.3 Error in metering accuracy at transitional flow rate (Qt :280 l/h)	+1.0%	0.0%
4.4 Error in metering accuracy at minimum flow rate (Q min :70 l/h)	+2.0%	-1.0%
5 Performance after Life test(Accelerated endurance test as per clause 12.4.4) conducted on two meters bearing no 265295 and 265293		
	Meter No	
	265295	265293
5.1 Minimum starting flow at which measurements starts	Satisfactory	Satisfactory
5.2 Pressure tightness test		
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		
5.3.1 For nominal flow rate (Qn: 3500l/h)	0.020	0.020
5.3.2 For maximum flow rate (Qmax :7000l/h)	0.065	0.065
5.4 Metering accuracy		
5.4.1 Error in metering Accuracy at maximum Flow rate (Qmax :7000l/h)	-0.7%	+0.9%

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NTH/NR/ME/2008/88-C

Meter No

		265226	265293	
5.4.2	Error in metering Accuracy at normal Flow rate (Q _n : 3500 l/h)	+ 0.2%	+ 0.6%	+/-2% Max
5.4.3	Error in metering Accuracy at transitional flow rate (Q _t : 280 l/h)	- 1.0%	- 1.0%	+/-2% Max
5.4.4	Error in metering Accuracy at minimum Flow rate (Q min.: 70l/h)	+0.0%	-2.0%	+/-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

		265226	265293	
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 3500l/h)	0.015	0.015	0.025 Max
6.3.2	For maximum flow rate (Q _{max} 7000 l/h)	0.065	0.065	0.100 Max
6.4	Metering Accuracy			
6.4.1	Error in metering accuracy at maximum flow rate (Q _{max} : 7000l/h)	+ 0.8%	+ 0.9%	+/-2% Max
6.4.2	Error in metering Accuracy at normal Flow rate (Q _n : 3500 l/h)	+ 0.3%	+ 0.6%	+/-2% Max
6.4.3	Error in metering Accuracy at transitional flow rate (Q _t : 280 l/h)	-1.0%	- 1.0%	+/-2% Max
6.4.4	Error in metering Accuracy at minimum Flow rate (Q min.: 70l/h)	+ 2.0%	-2.0%	+/-5% Max

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NTH/NR/ME/2008/88-C

Sl. No.	Particulars	Tested	Specification
7.	Meters size, threads, and dimensions (in mm) (Notations as per Table 2 of IS: 779-1994)		
7.1	Meter size	25 mm	25 mm
7.2	Threads	Satisfactory	G 1/4 B
7.3	Length of threads, on one side other side	21 21	12 Min 12 Min
7.4	Length of meter with nipples	380	380 +/± 5
7.5	Length of meter without Nipples	259	+ 0
7.6	Width (W)	91	170 Max
7.7	Height (H1)	35	65Max
7.8	Height (H2)	70	260 Max
8.	Value of verification Scale interval (I)	0.1	0.5 Max

Note:- The samples were tested at factory site on 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 25 mm, Multi jet and class "B"

Tested By
(Signature)
(ANIL CHOPRA)
SCIENTIST SB(Mech)

Checked By
(Signature)
(R.N. RAM)
SCIENTIST SC(Mech)

Approved By
(Signature)
(SHER SINGH)
SCIENTIST SD