

OPERATION

The type of meter shown here is called a nutating disc type of positive displacement meter. It consists of two major components, the chamber which measures the water and the register which records the volume of water flowing through the chamber portion of the meter.















Water enters the chamber here and pushes a disc causing it to rotate in a circular motion. This circular motion is transferred to a magnet located on the top of the chamber. The motion from this magnet is transferred to a similar magnet located in the register portion of the meter, thereby producing registration on the register.

One revolution of the chamber measures a fixed quantity of water, closely approximating 1/10th of one quart. Ten revolutions per quart and 40 revolutions per gallon. Through a series of gears located in the register the correct registration is achieved.

Because of its design it is virtually impossible for this type of meter to over-register or record more water than actually passes through it. The opposite is actually true. As wear occurs through use wear takes place on the chamber walls and disc creating spaces where water may pass without turning the disc in its circular path. As a general statement the older the meter the less accurate it becomes until it virtually will not register unless an extremely large flow passes through it. This is why your water bill may go up when an old meter is replaced with a new one. A new meter will pick up the very low flows that went unmeasured before.

Questions - invite questions or closer examination of sample meter.

**Unrepaired Leaks
can be Costly**

Water Loss in Gallons		
Leak this Size	Loss per Day	Loss per Month
	120	3,600
	360	10,800
	693	20,790
	1,200	36,000
	1,920	57,600
	3,096	92,880
	4,296	128,980
	6,640	199,200
	6,984	200,520
	8,424	252,720
	9,888	296,640
	11,324	339,720
	12,720	381,600
	14,952	448,560

Health
 Quality Leakage Control Surveys
 CONSULTANTS INCORPORATED
 100 Tosca Drive, Stoughton,
 Massachusetts 02072