

Meter Testing Tanks

Calibrated Testing Tanks

In water meter shops a calibrated tank (or tanks) is essential. It provides an accurate volume against which meter registration is compared in testing. All tanks are guaranteed accurate within one-fourth of one percent at full scale.

Calibration of Tanks

All Calibrated Tanks have gauge glasses with strips marked clearly to show volumes in gallons, cubic feet or both. All tanks are also marked to show percentages fast or slow when the test flow through a single meter is stopped at a specified registered volume. In series testing, the flow is ordinarily stopped when the required volume is reached in the tank. The accuracy of each meter is then computed by dividing its registered volume by the actual volume in the tank.

Test volumes are ordinarily chosen to correspond to one or more revolutions of the test hand on the meter dial. Thus tanks are calibrated at one cubic foot, ten gallons, ten cubic feet and one-hundred gallons. Larger tanks are available as listed in the table.



Pictured above are 10 gallon and 100 gallon tanks, ordinarily used together as are the one cubic foot and ten cubic foot tanks. In nearly all cases two tanks are recommended, the smaller for low and intermediate tests and the larger for high flow tests.

Tank Design and Construction

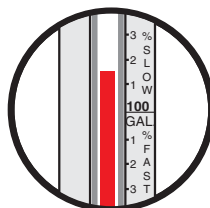
All Calibrated Tanks are made of steel. The 100 gallon and smaller sizes are galvanized coated. All have non-swirling vanes to provide for quick and complete drainage. All have quick-opening drain valves and aluminum gauge strips with brass fittings. Each gauge glass has a red stripe at the back which is magnified by the water so that readings are easy and accurate.

Special Large Tanks

All calibrated tanks above the 100 gallon size can be made to special order if the space available in your meter shop requires limitations in height or diameter. Dimensions shown in the table are standard. Large tanks are painted and are fitted with quick-opening drain valves and aluminum gauge strips with brass fittings. They also have non-swirling vanes.

The position of the gauge glass can be as specified, expressed in degrees clockwise or counter-clockwise from the drain valve as viewed from above. Standard positioning of the glass gauge is above the drain valve.

NO.	NOM. SIZE	DIA.	HEIGHT	CALIBRATION PONTS	DRAIN SIZE	APPROX. WT. LBS.
1-F	1 CF	7"	60"	1 & .05 CF	1"	105
10-GF	10 G	8"	60"	10 & 5 G - 1 CF	1"	105
20-GF	3 CF	13"	60"	3 & 2 CF - 20 & 10 G	1.5"	130
10-FG	10 CF	22"	60"	10 & 5 CF - 70 & 30 G	1.5"	190
100-GF	100 G	26"	60"	100 & 50 G - 10 CF	2"	240
50-F	50 CF	47"	72"	50 & 25 CF	3"	600
500-G	500 G	54"	72"	500 & 250 G	3"	790
100-F	100 CF	67"	72"	100 & 50 CF	3"	800
1000-G	1000 G	72"	78"	1000 & 500 G	3"	1300
25-L	25 L	7"	60"	AS SPECIFIED BY PURCHASER	1"	105
50-L	50 L	9"	60"		1"	—
100-L	100 L	13"	60"		1.5"	—
150-L	150 L	16"	60"		1.5"	—
200-L	200 L	19"	60"		1.5"	—
400-L	400 L	26"	60"		2"	240
500-L	500 L	30"	60"		2"	—
600-L	600 L	32"	60"		2"	—
1000-L	1 CM	39"	72"		3"	—
2000-L	2 CM	54"	72"		3"	790
3000-L	3 CM	67"	72"		3"	800
4000-L	4 CM	73"	78"		3"	1600
5000-L	5 CM	84"	78"		3"	—



Detail of Gauge Glass:
The water in the gauge glass magnifies the red stripe on the back, making the gauge more easily read.