

## Volumetric Air Meter (Plastic)

### ASTM C 173

Meter made from PVC and FRP. Very similar in design to model C-440. It weighs only 5.5 lb (2.5 kg). It features non threaded construction for easy use. A stainless steel "V" clamp holds the two halves together.



C-445

"O" ring seals prevent leakage. Expansion plug top. This Meter meets ASTM C 173-94 except for not being "constructed out of machined metal".

The base volume is 134 in<sup>3</sup> (2.2 dm<sup>3</sup>) and the sight tube reads from 0-9%. Supplied as a kit, it includes the meter, syringe, tamping rod, strike off bar, funnel, mallet, calibrated cup and a hard sided plastic carrying case.

C-445	Air Volume Meter (Volumetair™) w/ acc. in case	18.0 lb
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## Pressure Type "B" Meter

### ASTM\* C 231 AASHTO\* T 152

\* See Standards Buyer's Guide at [www.DGSI.info/3000](http://www.DGSI.info/3000).

The Type "B" Meter measures the air content of fresh concrete based on the pressure-to-volume relationship of Boyles Law. Pressure is applied to the sample to compress the entrained air in the pores. The Type "B" Meter uses the change in known volume of air to determine the air content of the mix. The readings are not affected by changes in barometric pressure. This method is faster to use than the volumetric method. The meter is made from a corrosion resistant aluminum alloy with a heavy duty pump and built-in gauge (0-20%). The base has a volume of 1/4 ft<sup>3</sup> (7 dm<sup>3</sup>) and can also be used for unit weight measurements. Instructions for use includes a chart for using the meter to determine the specific gravity of aggregates.

Kit includes the meter, syringe, tamping rod, calibration vessel, strike-off bar and plastic carrying case.



C-435A

C-435A	Type "B" Air Meter	35 lb
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## Volumetric Air Meter (Metal)

### ASTM C 173 AASHTO T 196

A Volumetric Air Meter measures air entrainment in fresh concrete by the "Volumetric Method." Air is removed from a known volume of concrete by agitation in an excess of water. It may be used with any type of aggregate including light weight and porous material. The test is not affected by atmospheric pressure and the specific gravity of the material need not be known. A direct reading sight gauge is built-in to the instrument. The base has a volume of 130 in<sup>3</sup> (2.13 dm<sup>3</sup>) and the sight tube reads 0-10%. These Meters can be used as a pycnometer to determine the specific gravity of cement, sand or gravel as well as the percent of free-water in damp sand and gravel.



C-440A

C-440 is machined bronze. The base and upper chamber of model C-440A is constructed of machined aluminum. Either model is supplied in a transport case with straight edge, measuring cup, tamping rod, syringe, baffle-bottom funnel and instructions.

Volumetric Air Meter		
C-440	Roll-A-Meter™ (bronze), in wood case	35 lb
C-440A	Roll-A-Meter™ (aluminum), in plastic case	11 lb

## Calibration Vessel

These Calibration Vessels may be used with any 1/4 ft<sup>3</sup> (7 dm<sup>3</sup>) Concrete Air Entrainment Pressure Meter. Their volume is precisely 354 ml which is exactly 5% air by volume when placed in any 1/4 ft<sup>3</sup> pressure meter bucket. Use two to check at 10%. It is best used if placed in a meter bucket pre-filled with water.



C-44201P



C-44201

C-44201	Calibration Vessel, brass, 1/4 ft <sup>3</sup> , 5%	2 lb
C-44201P	Calibration Vessel, plastic, 1/4 ft <sup>3</sup> , 5%	1 lb

## Air Indicator Kit

### AASHTO T 199

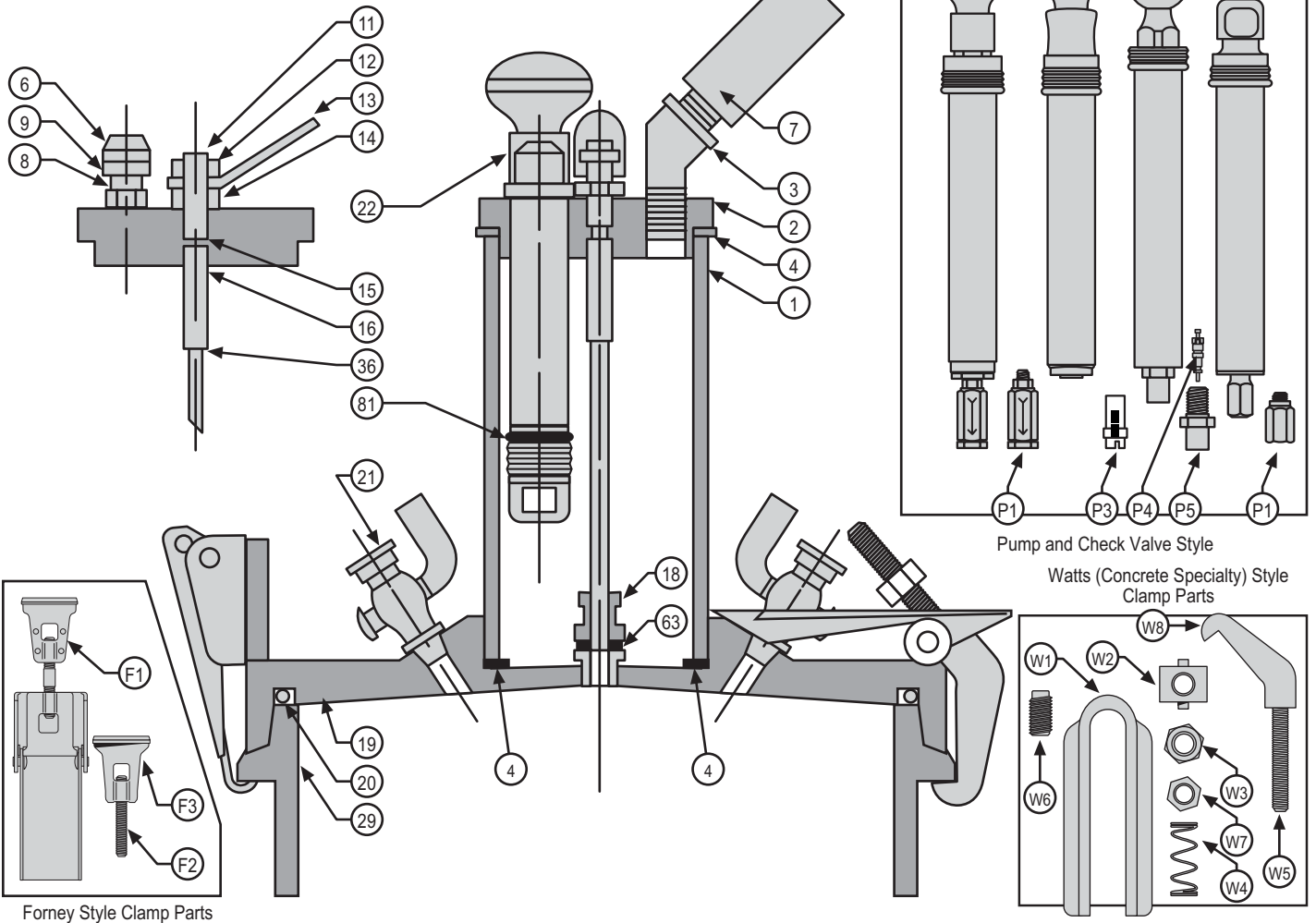
The test takes about 3 minutes to perform and is ideal for field use at either a pour site or batch plant. It may also be used to determine whether more thorough testing may be needed. The open end of the vial has a reinforced lip and extra graduation marks are included on the stem. The kit includes a 6 1/4 x 1 1/8-in (159 x 28 mm) air indicator vial with stopper/cup, squeeze bottle for alcohol, brush and instructions in a plastic case.



C-450

C-450	Air Indicator Kit	4.0 lb
C-45020HW	Air Indicator Tube (Replacement)	

Parts for Type "B" Air Pressure Meter



Drawing #	Part No.	Description	Qty Req'd
1	C-43501	Pressure Chamber	1
2	C-43502	Pressure Chamber Cap	1
3	C-43503	Pressure Chamber Elbow	1
4	C-43504	Pressure Chamber Gasket	2
6	C-43506	Air Bleeder Cap	1
	C-43507	Gauge Complete	1
Not Shown	C-43508	Gauge Lens, 4-1/4 in OD, Acrylic	1
Not Shown	C-43509	Gauge Lens, 3-5/8 in OD, Glass	1
Not Shown	C-43510	Gauge Lens, 3-13/16 in OD, Glass	1
8	C-43505	Air Bleeder Stem	1
9	C-43569	Air Bleeder Cap Gasket	1
11	C-43511	Needle Valve Stem	1
12, 36	C-43512	Needle Valve Nut/Spring Retainer	1
	C-435A12	Needle Valve Snap Ring Spring Retainer	1
13	C-43513	Needle Valve Lever	1
14	C-43514	Needle Valve Spacer	1
15	C-43515	Needle Valve O-ring	1
16	C-43516	Needle Valve Spring	1
18	C-43518	Needle Valve Seat Assembly	1
19	C-43519	Cover	1
20	C-43520	Cover O-ring	1
21	C-43521	Cover Petcock	2
22	C-470	Universal Pump Assembly, Complete	1
29	C-43529	Base	1
63	C-43517	Needle Valve Seat O-ring	1

Drawing #	Part No.	Description	Qty Req'd
81	C-43561	Pump Piston O-ring	1
Not Shown	C-44131	Calibrating Vessel	1
Not Shown	C-44132	Calibrating Tube (Curved)	1
Not Shown	C-44133	Calibrating Tube (Straight)	1
Not Shown	C-44134	Strike-Off Bar	1
Not Shown	C-44135	Tamping Rod	1
Not Shown	C-44136	Syringe	1
Not Shown	C-435A22-46	Pan-Head Screw #10 x .5	3/latch
F1	C-435A22	Latch Assembly, Complete, 3 Hole	4
F1	C-435A22B	Latch Assembly, Complete, 2 Hole	4
F2	C-435A22-43	Latch Tab Stud	1
F3	C-435A22-44	Latch Tab	1
P1	C-43566A	Pump Check Valve	1
Not Shown	C-46020	Check Valve O-ring for P3	1
P3	C-46050	Pump Check Valve (Nylon/Plastic)	1
P4	C-43566	Pump Check Core Only	1
P5	C-43565	Pump Check Kit with Core	1
W1	C-43526	Clamp Toggle	1/clamp
W2	C-43524	Clamp Trunion	1/clamp
W3	C-43523	Clamp Stud Nut	1/clamp
W4	C-43525	Clamp Spring	1/clamp
W5	C-43542	Clamp Stud	1/clamp
W6	C-43527	Clamp Set Screw	1/clamp
W7	C-43528	Clamp Lock Nut	1/clamp
W8	C-43522	Clamp	1/clamp

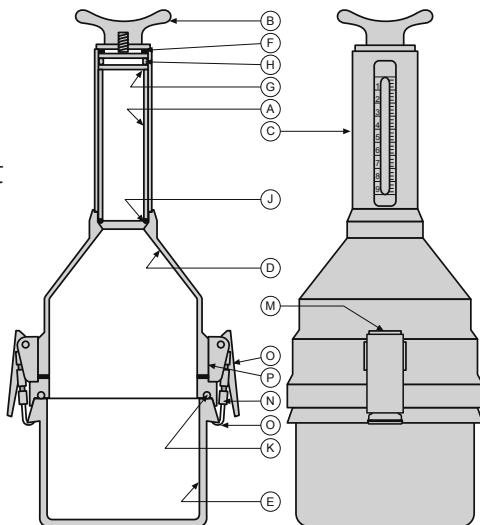
## Plastic Air Meter Parts

### C-445 Plastic Air Meter Replacement Parts

C-44501	Top (Expansion Plug)
C-44502	Calibrated Tube (Neck) Assembly
C-44503	Calibrated Decal Only
C-44504	Meter Top Housing
C-44505	Meter Bottom Housing (Base)
C-44506	Meter Instruction Decal
C-44507	Clamp Assembly
C-44509	Tamping Rod, 5/8 in x 12 in long
C-44510	Funnel
C-44511	Measuring Cup
C-44512	Strike-Off Bar
C-44515	Meter Top Housing O-Ring Gasket



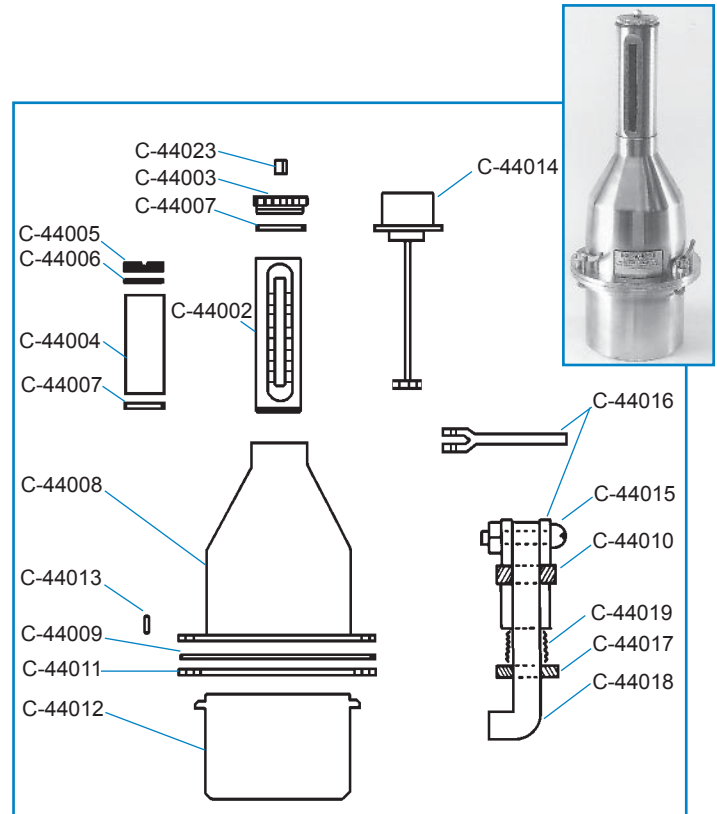
## Aluminum Volumetric Air Meter Replacement Parts



### C-440A Aluminum Volumetric Air Meter Replacement Parts

Item	Part Nbr.	Description	Qty Req
A	C-44004	Plastic Sight Tube	1
B	C-440A02	Cap (New Expansion Style)	1
C	C-440A03	Graduated Tube	1
D	C-440A04	Upper-Chamber Body	1
E	C-440A05	Base	1
F	C-440A06	Gasket, New Cap	1
G	C-44006	Gasket, Top Sight Tube	1
H	C-44005	Sight Tube Clamp Ring	1
J	C-44007	Gasket, Lower Sight Tube	1
K	C-440A11	O-ring, Upper-Chamber Body	1
L	C-44014	Baffle Funnel Assembly	1
M	C-435A22	Latch Assembly	2
N	C-435A22-43	Latch Tab Stud	1
O	C-435A22-44	Latch Tab	1
P	C-435A22-46	Pan Head Screw #10 x 1/2"	3/latch

## Roll-A-Meter™ and Replacement Parts



Roll-A-Meter, Model C-440 Components

### C-440 Roll-A-Meter (Whitecap [Watts]) Replacement Parts

C-44002	Graduated Tube	C-44012	Brass Base
C-44003	Brass Cap	C-44013	Guide Pin
C-44004	Gauge Tube	C-44014	Battle Funnel Ass'y.
C-44005	Glass Clamp Ring	C-44015	Toggle Pin
C-44006	Top Glass Gasket	C-44016	Toggle Lever
C-44007	Bottom Glass Gasket	C-44017	Spring Retainer
C-44008	Upper Chamber	C-44018	Jay Bolt
C-44009	Chamber Gasket	C-44019	Jay Bolt Spring
C-44010	Adjusting Nut	C-44028	Clamp Ass'y. Cpte.
C-44011	Brass Gasket Ring	C-44023	Brass Plug for Cap
<b>Not Shown</b>			
C-44000	Gasket Kit	C-44135	Tamping Rod
C-44020	Brass Cup Measure	C-44136	Syringe
C-44134	Strike-Off Bar	C-44026	Carrying Case
C-44022	Spanner Wrench		